TVIP52501

User Manual

Version 02/2011

Original English user manual. Keep for future use.

Introduction

Dear Customer,

Thank you for purchasing this product.

This product meets the requirements of the applicable European and national guidelines. The corresponding declarations and documents can be obtained from the manufacturer (www.abus-sc.com).

To maintain this condition and to ensure risk-free operation, you as the user must observe these operation instructions!

Before initial start-up, read through the complete operating instructions observing operating and safety instructions.

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All rights reserved.**

If you have any questions, please contact your installer or your local dealer!

Disclaimer

This user manual was prepared with greatest care. If you should notice omissions or inaccuracies, please inform us about these on the back of this manual given address.
The ABUS Security-Center GmbH assumes no liability for technical and typographical faults and reserves the right to make at any time modifications to the product or user manual without a previous announcement.
The company is not liable or responsible for direct and indirect subsequent damages which are caused in connection with the equipment, the performance and the use of this product.
No guarantee for the content of this document is taken.

Icon explanation

A flash in the triangle is used if there is danger for the health, e.g. by an electric shock.

An exclamation mark in the triangle points to an important note in this user manual which must be minded.

This symbol can be found when you are to be given tips and information on operation.

Important safety advice

The warranty will expire for damage due to non-compliance with these operating instructions. ABUS will not be liable for any consequential loss!

ABUS will not accept liability for damage to property or personal injury caused by incorrect handling or non-compliance with the safety-instructions.
In such cases the warranty will expire.

Dear customer,
The following safety instructions are intended not only for the protection of your health, but also for the protection of the device. Please read through the following points carefully:

- There are no parts on the inside of the product which need to be serviced. Apart from this, the license (CE) and the guarantee/warranty will lapse if you open/take the product apart.
- The product will be damaged even it falls from a low height.
- This device can be used in internal area.
- At the installation of the product please take care that direct sunlight cannot fall onto the image sensor of the device. Please follow the installation instructions in the corresponding chapter of this user manual.

Avoid using the device under the following unfavorable ambient conditions:

- wetness or excessive air humidity
- extreme cold or heat
- direct sunlight
- dust or combustible gases, vapors or solvents
- strong vibration
- strong magnetic fields, such as those found in the vicinity of machinery or loudspeakers
- the camera should not positioned with opened iris towards the sun - this can lead to the destruction of the sensor.
- the camera may not be installed on unstable surfaces

General safety instructions:

- Do not leave packaging material lying around carelessly. Plastic/ foil/bags and polystyrene parts etc. could become dangerous toys for children.
- For safety reasons don't give the camera into child hands due to them being able to swallow small parts.
- Please do not insert objects through the openings into the device.
- Use only accessories which are specified by the manufacturer.
  Please do not connect incompatible parts to the device.
- Please pay attention to the safety instructions and user manuals of the other connected devices.
- Check the device for damages before installation. If this should be the case please do not use it.
- Please adhere to the operational voltage limitations listed in the technical data. High voltage could destroy the device and pose a health hazard (electric shock).

Safety advice

1. Mains supply: Power supply 110 - 250VAC, 50/60Hz / 12VDC, 1,5A (included in package content)
   Operate this product only from the type of power supply indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your local power company. Disconnect the product from the mains before you start any maintenance or installation procedures.

2. Overloading
   Do not overload a wall outlet, extension cord or adapter as this may result in electric fire or shock.

3. Cleaning
   Disconnect the product from the wall outlet before cleaning. Use a light damp cloth (no solvents) to dust the product.

Warnings

Follow all safety and operating advises before starting-up the device!

1. Follow these directions in order to avoid damage of the power cord or plug:
   - Do not modify or process the power cord or plug arbitrarily.
   - Do not bend or twist the power cord.
   - Make sure to disconnect the power cord holding the plug.
   - Keep heating appliances as far as possible from the power cord in order to prevent the cover vinyl from melting.

2. Follow these directions. Failure to follow any of them may cause electrical shock:
   - Do not open the main body, except for installing the HDD.
     Disconnect the product from the mains before you start.
   - Do not insert metal or inflammable objects inside the product.
   - In order to avoid any damage during lighting use a surge protection.

3. Do not use the product when it is out of order. If you continue to use the product when defective, serious damage can be caused to it. Make sure to contact your local product distributor if the product is out of order.

During the installation into an existing video surveillance system make sure that all devices are disconnected from the low and supply voltage circuit.

If in doubt allow a professional electrician to mount, install and wire-up your device. Improper electrical connection to the mains does not only represent at threat to you but also to other persons.
Wire-up the entire system making sure that the mains and low voltage circuit remain separated and cannot come into contact with each other in normal use or due to any malfunctioning.

Unpacking

While you are unpacking the device please handle it with utmost care.

If you notice any damage of the original packaging, please check at first the device.
If the device shows damages, please contact your local dealer.

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Intended use

The network camera is equipped with a high-end image sensor. For video surveillance the video can be used for indoor surveillance application. In order to run the camera outside an outdoor housing is necessary.

A detailed description of all functions can be found in chapter „4. Initial start-up“.

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Any other use than that described above can lead to damage to the product and in addition involve other risks. This does not include operation for other applications and would in case of doing so the guarantee and any related liability will lapse. This is also the case if any unauthorized changes or additions have been made to the product.

Please read through the entire manual carefully before putting this product into operation. This operating manual contains guidelines that are important for correct mounting and operating.

1. Scope of delivery

ABUS HD Network Camera
TVIP52501

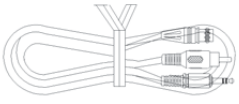
Power supply

Mounting bracket

Quickguide

Software CD
including user manual

Video/audiocable



2. Installation

Make sure that all previous listed accessories were included in scope of delivery. In order to operate the camera an Ethernet network cable is necessary. The cable has to comply with specifications of UTP categories 5 (CAT 5) and must not exceed 100 meters of length.

2.1 Power supply

Before you start the installation make sure that the mains voltage and the nominal voltage of the camera correspond.

2.2 Mounting the lens

The camera can be used only with CS mount lens.

In order to use Auto-Iris (AI) lens the connector for the cable can be found on the left side of the camera. You can also use a manual lens. The camera will automatically recognize the type of lens. For the best possible picture quality an AI lens is recommended.

The content of delivery for this network camera does not include a lens. Please ensure you are using a suitable megapixel lens for camera operation.

2.3 Installing the camera

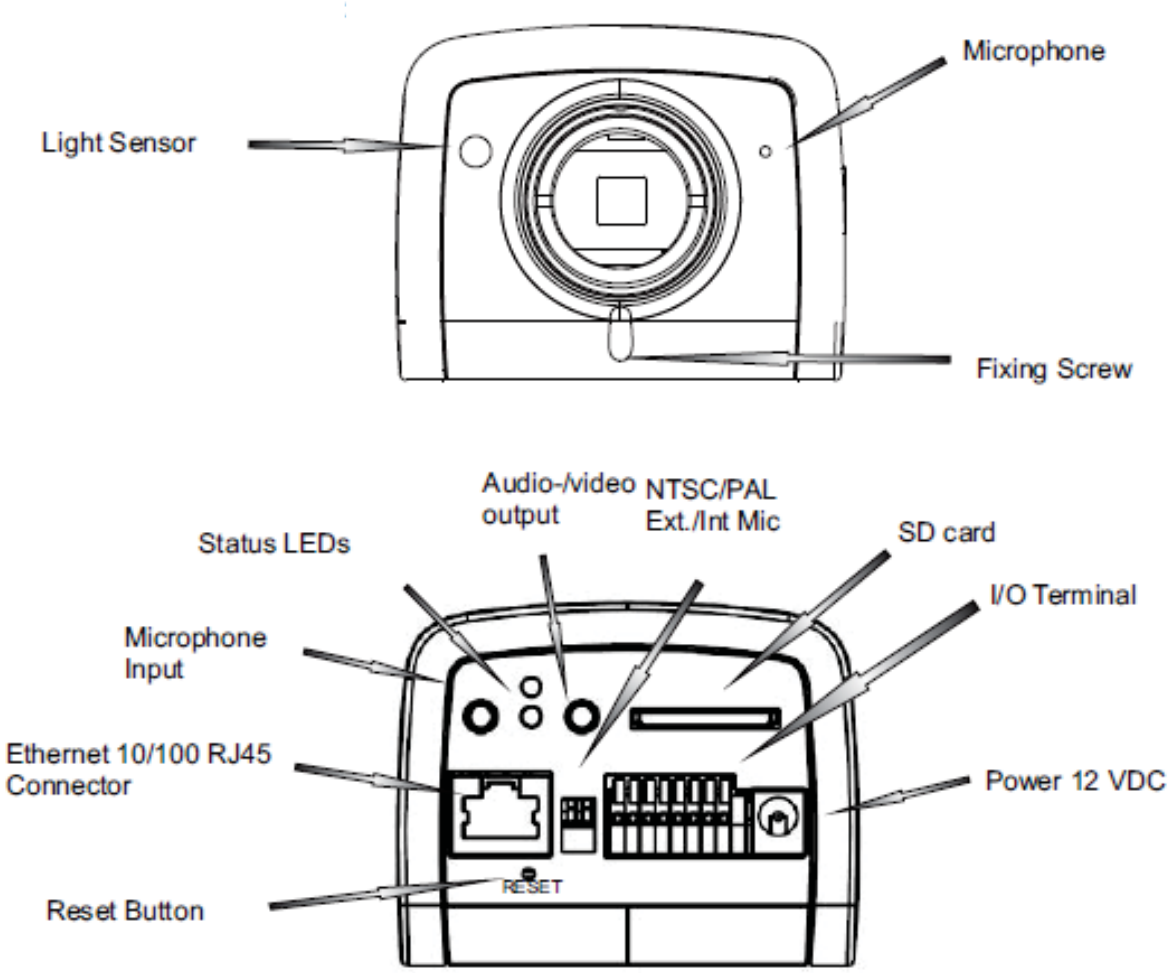
For installing the camera to wall you need to mount the camera bracket to the bottom of the camera. If the installation of the camera is on a ceiling you first need to mount the socket to the top of the camera with the included screws. You can then mount the camera bracket to the socket.

ATTENTION!
Make sure to disconnect the camera from the power supply during installation.

ATTENTION!
Never point the camera with opened iris towards the sun. This can damage the image sensor.

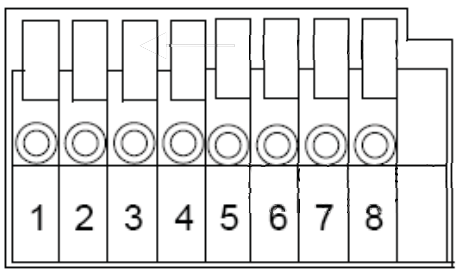
3. Camera description

3.1 Front view/Rear view



3.2 Alarm inputs and digital outputs

PIN	Descritption
1	+12V Output
2	Digital output
3	Digital input
4	Ground
5	24V AC input
6	24V AC input
7	RS-485 +
8	RS-485 -



3.3 Video output and DIP switches

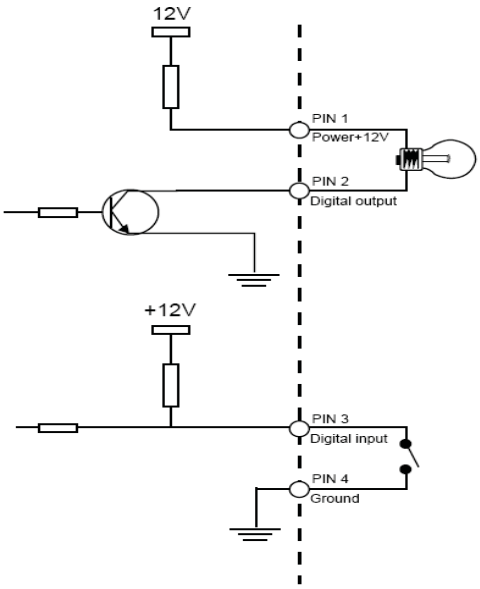
Analogue video output (NTSC/PAL):

Connect the RCA connector from the video/audio cable with an analogue video input from a monitor. (e.g.: TVAC10100)

To set the correct video norm (**PAL/NTSC**) please use the DIP switch on the back panel of the camera.

External / Internal microphone (**Ext. /Int.)**
Use this DIP switch to change between integrated microphone and external audio input.

3.4 Gate input / output and status display



Status LED description:

Status / LED colour	Green	Red
System start	Off	On
Camera turned off	Off	Off
Network works (heartbeat)	1/s	On
Network problem	Off	On
Firmware update	1/s	0.1/s
Restoring factory settings	0.1/s	0.1/s

In order to **reboot** the camera or restore the factory settings press the reset button. Use an appropriate small tool.

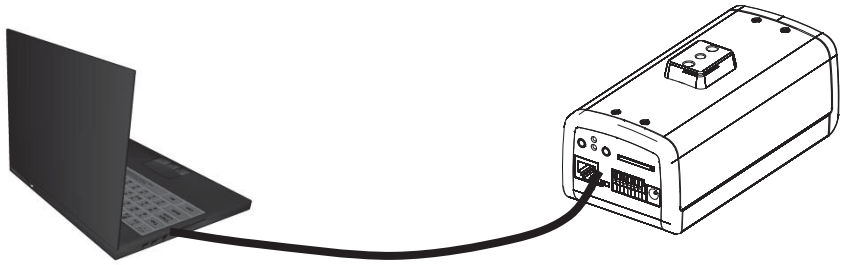
Camera reboot: Press the reset button once and wait until the camera to restart.

Restore factory settings: Press and hold the reset button for approx. 30 seconds until the status LEDs start flashing. All settings will be reset to factory default.

4. Initial start-up

Direct connection between camera and PC / laptop

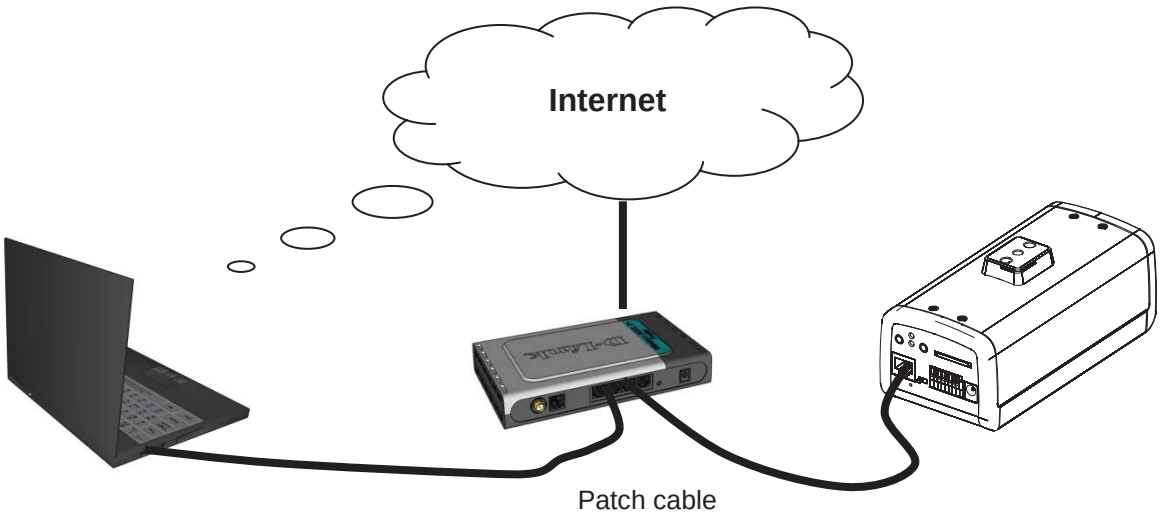
1. Make sure to use a crossover network cable
2. Connect the cable with the Ethernet port of the PC / Laptop and the camera
3. Connect the power supply to the camera
4. Configure the IP address of the PC / Laptop to 169.254.0.1
5. Continue with point 4.1 in order to finish the initial installing and build-up a connection to the camera



① Crossed Ethernet cable

Connecting the camera by using a router / switch

1. Make sure to use a pair of patch cables
2. Connect the cable with Ethernet port of the PC / laptop with the router / switch.
3. Connect the cable with the network cable and with the router / switch.
4. Connect the power supply to the camera
5. f there is a name server (DHCP) available in your network then set the IP address of your PC / laptop to “automatically receive IP address”
6. If there is no name server (DHCP) available set the IP address of your PC / laptop to 169.254.0.1
7. Continue with point 4.1 in order to finish the initial installing and build-up a connection to the camera



Patch cable

4.1 First camera access

The first camera access takes place by using the program „Installation Wizard 2“.
After starting the wizard it will automatically search the network for all connected EyeseoIP network cameras and video servers.

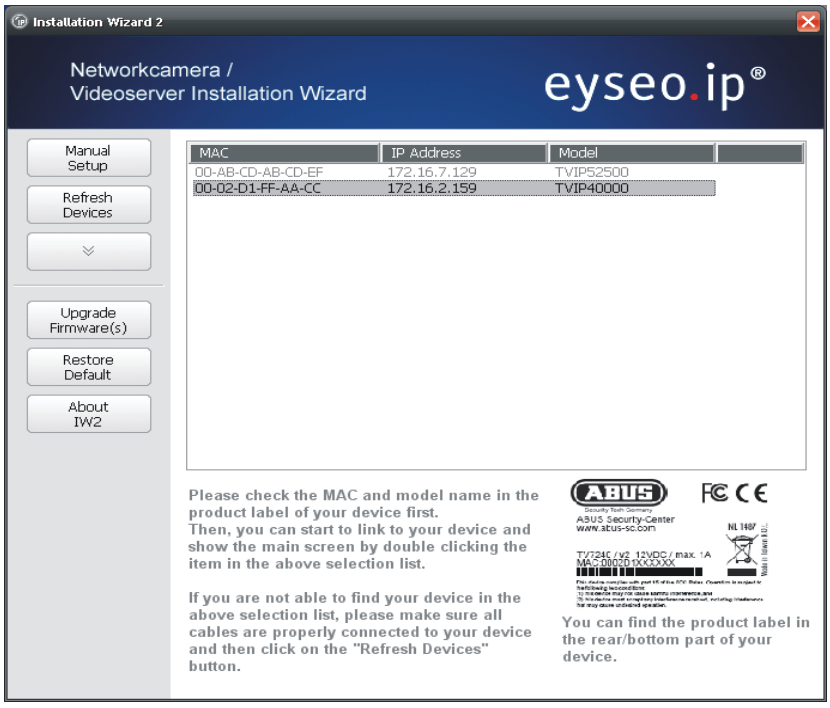
You can find the program on the on the CD at **CD-ROM\Tools\EyseoIP Tools**

Install the program on your PC and start it. The wizard will automatically search your network for EyseoIP camera.

The IP address at factory default is **169.254.0.99**. Without using the installation wizard you can only connect to the camera if the IP address of the PC is between 169.254.0.1 and 169.254.0.98.

If a DHCP server is active in your network the IP address for your PC and camera will be set automatically.

Start now the installation wizard. If no DHCP server is active the installation wizard adds a virtual IP address in the range of 169.254.0.xx. As long as the installation wizard is active you can access the network camera by using the virtual IP address. We recommend adjusting immediately the cameras network settings to the IP settings of the PC’s network.


Installation Wizard 2
Networkcamera /
Videoserver Installation Wizard
eyseo.ip®
Manual Setup
Refresh Devices
Upgrade Firmware(s)
Restore Default
About IW2
MAC
IP Address
Model
00-AB-CD-AB-CD-EF
172.16.7.129
TVIP52500
00-02-D1-FF-AA-CC
172.16.2.159
TVIP40000
Please check the MAC and model name in the product label of your device first.
Then, you can start to link to your device and show the main screen by double clicking the item in the above selection list.
If you are not able to find your device in the above selection list, please make sure all cables are properly connected to your device and then click on the "Refresh Devices" button.
ABUS
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www.abus-sc.com
You can find the product label in the rear/bottom part of your device.

After closing Installation wizard 2 the additional virtual IP adress will be removed. If IP-Camera’s IP address is still in a different IP area then the one from your PC the camera access is no longer possible.

4.2 Connecting to the camera by using a web browser

If connecting to the camera by using Mozilla Firefox or Netscape a QuickTime stream will be displayed. This requires that QuickTime from Apple is installed

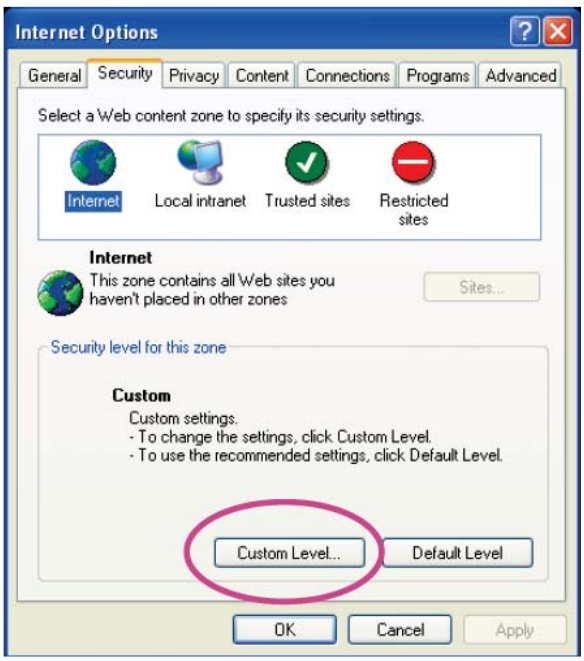
In order to show the video stream when using Microsoft Inter Explorer a video plug-in is required. This will be installed when connecting to the camera. A window will appear asking you to install the plug-in. Press the install button to continue an install the plug-in. Depending on the security setup of the Internet Explorer the installation might be blocked. In this case you need to adjust the security settings.

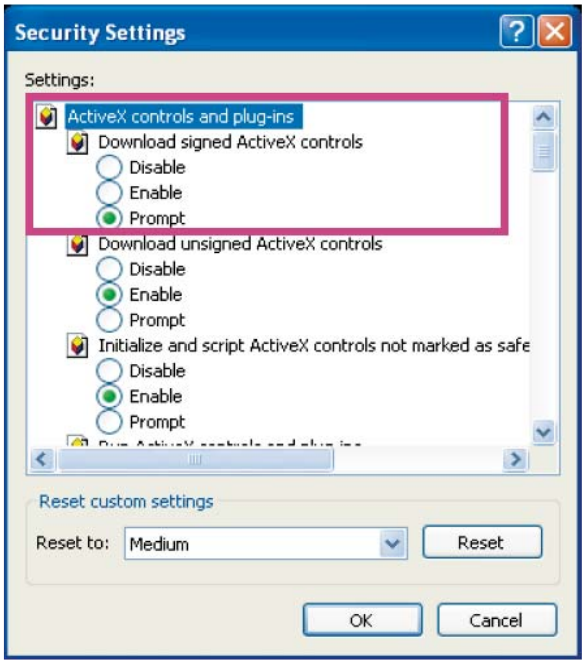
4.3 Installing the Active-X plug-in

Internet Explorer - Sicherheitswarnung
Möchten Sie diese Software installieren?
Name: RTSP MPEG4 SP Control
Herausgeber: Security-Center GmbH & Co. KG
Mehr Optionen
Installieren
Nicht installieren
Dateien aus dem Internet können nützlich sein, aber dieser Dateityp kann eventuell auf dem Computer Schaden anrichten. Installieren Sie nur Software von Herausgebern, denen Sie vertrauen. Welches Risiko besteht?

For Mozilla Firefox or Netscape users, your browser will use Quick Time to stream the live video. If you don't have Quick Time on your computer, please download it first, then launch the web browser.

4.4 Adjusting the security settings





NOTICE!
The security settings of the Internet Explorer can prevent displaying the video stream. Change at „Extras/Internet Options/Security" to a lower level. Make sure to activate the ActiveX control elements at "Custom Level".

4.5 Password authentication

At factory default there is no admin password set for accessing the camera. For security reasons the administrator should immediately set a password after the initial setup. After setting an admin password the camera will request for every access a username and password.

The permanent default username for the admin will be „**„root"** and cannot be changed. The only way to reset the password if it is forgotten is to reset the camera to factory default settings.

In order to access the camera enter username “root” and the before defined password.

-> After successful authentication you will connect to the camera and a video stream will be displayed.

4.6 Connecting to the camera by using a RTSP player

You can display the MPEG-4 video streams by connecting to the camera with a RTSP capable media player. Following free media players support RTSP:

- VLC Media Player
- Real Player
- QuickTime Media Player

The RTSP address has to be entered as following:

rtsp://<IP-address of the network camera>:<rtsp Port>/<Name of the video stream >

How to change the name of the video stream will be explained further on.

Example:
rtsp://192.168.0.99:554/live.sdp

4.7 Connecting to the network camera by using a mobile phone

Make sure that your mobile phone is able to establish a internet connection. Furthermore the mobile phone has to have an RTSP capable media player like:

- Real Player
- Core Player

More information you can find in chapter “RTSP-Transmission”.

Please notice that limited access can occur, due to low mobile network bandwidth. We recommend following settings to optimize the video stream:

Video compression	MPEG-4
Resolution	176x144
I Frame	1 Second
Video quality (constant bit rate)	40 Kbit / Second
Audio Compression (GSM-AMR)	12.2 Kbit / Second

If the media player does not support the RTSP authentication, then deactivate this option in the RTSP settings of the camera.

The RTSP address has to be entered as following:

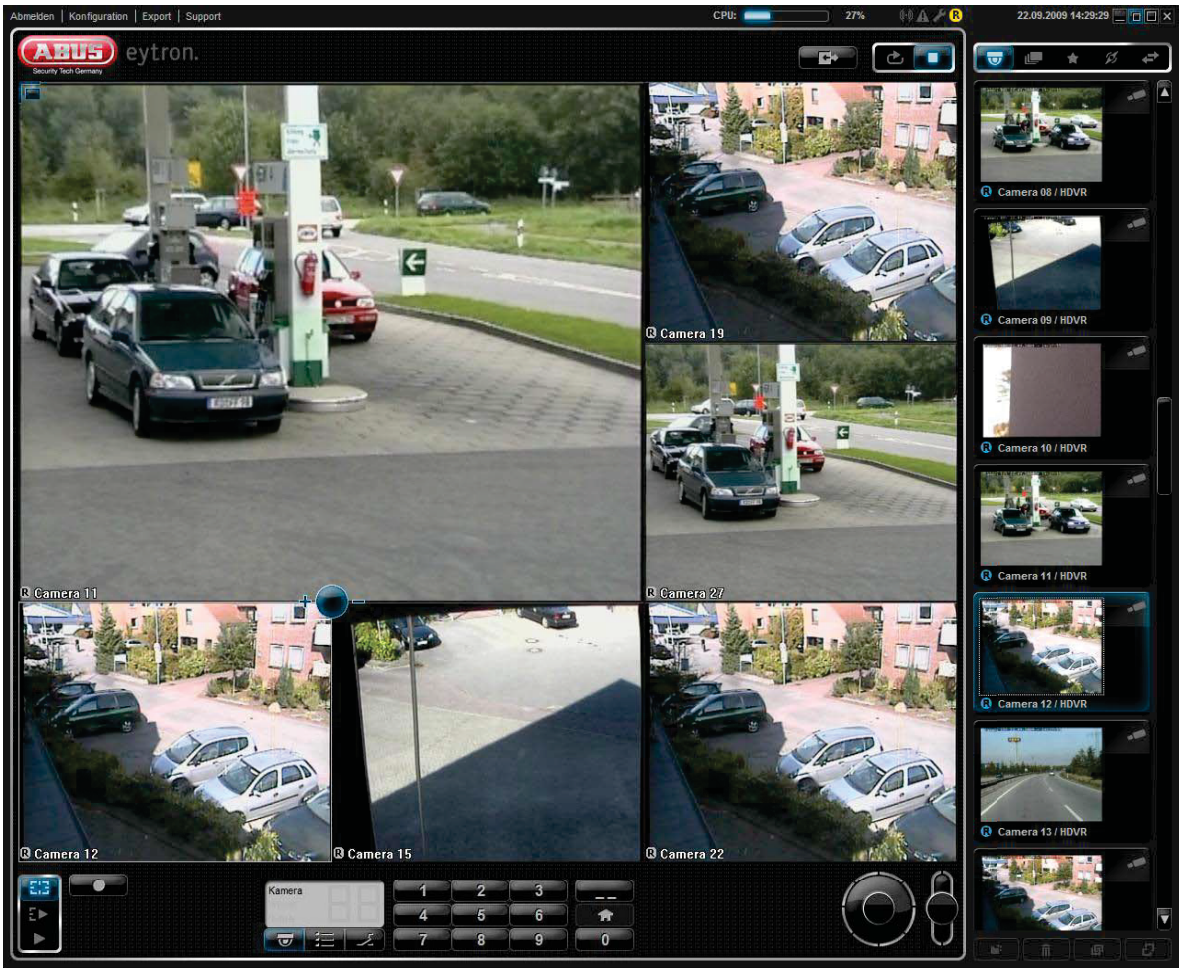
rtsp://<IP-address of the camera >:<rtsp Port>/<Name of the video stream >

How to change the name of the video stream will be explained further on.

Example:
rtsp://192.168.0.99:554/live.sdp

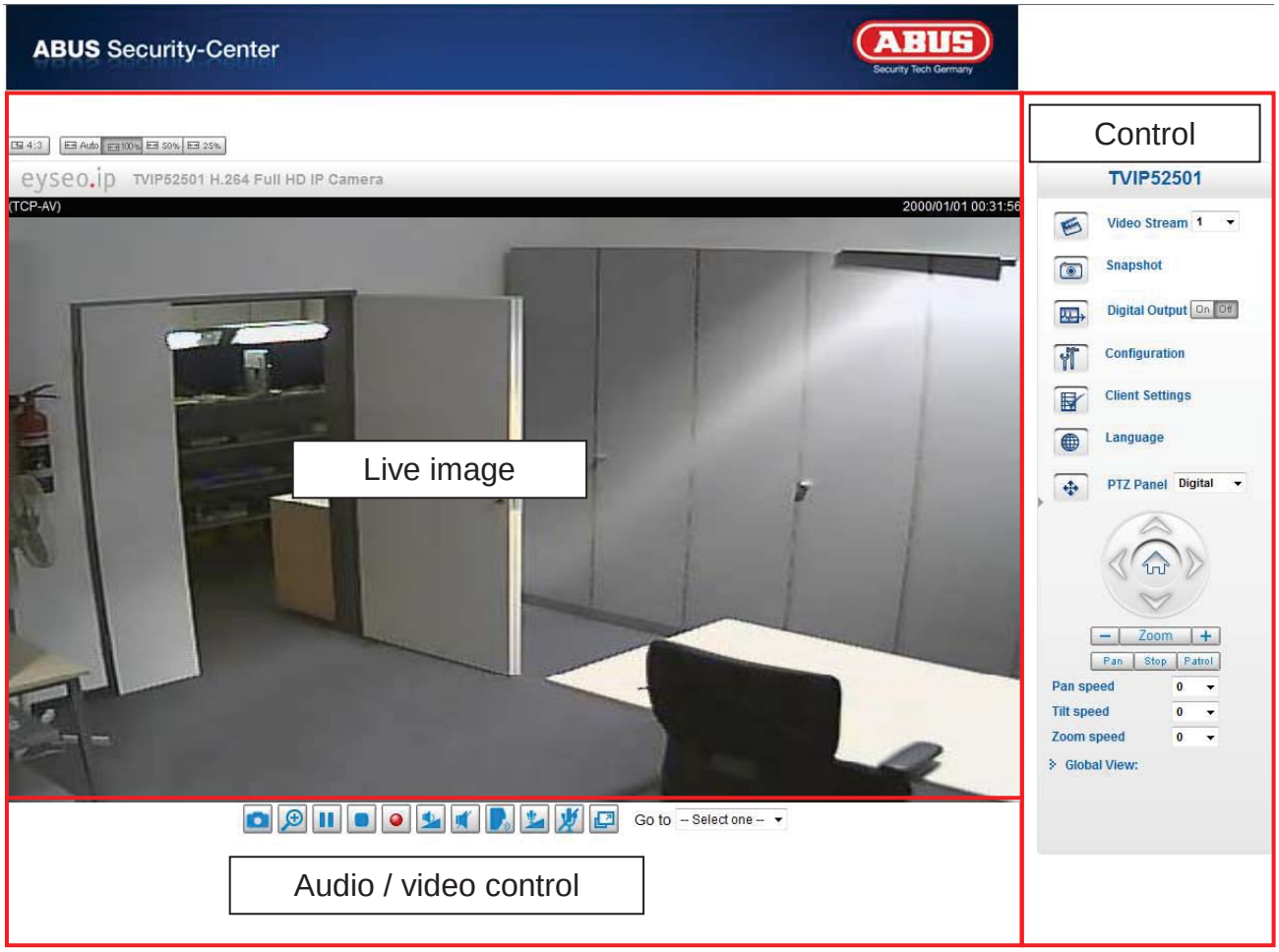
4.8 Connecting to the camera by using eytron VMS Express

The included CD contains the free recording software eytron VMS Express. This software enables you to connect and display to several IP cameras and record these. Further information can be found in the manual of the software located on the CD.



5. User functions

Open the main menu on the network camera. The interface is divided into the following main areas:



Live image

- Change the zoom level by pressing the mouse scroll button.
- Click in the live picture to take over control of an analogue pan/tilt camera directly.

Network camera control

Video Stream

Select from video streams 1 – 4 to view the live image.

Snapshot

Create a snapshot (without ActiveX plug-in).

Digital Output

Switch the digital output on and off manually.

Configuration

Configure the network camera (administrator settings).

Client Settings

Configure the client settings; you can find detailed information on the following pages.

Language

Set the interface language.

Pan/tilt/zoom control

Use the control buttons to control the digital and mechanical pan/tilt/zoom function.

Variable view sizes

Using these buttons, you can choose from three different zoom levels for the live picture (100%, 50% and 25%). You can also adjust the live picture to automatically fit the current browser size. Do do this, select the “AUTO” option.

Screen ratio

Press the “4:3” button to set the page ratio of the live picture to 4:3.

Show/hide menu

Global view

Here you can adjust the live image and navigate to single point of interests

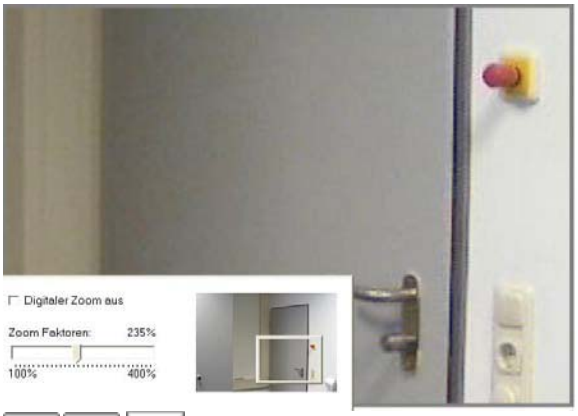
5.1 Audio / video control

Variable view sizes

The web browser displays a new window containing the snapshot. To save the image file to your PC, right-click the image and select “Save As”.

Digital zoom and snapshot

Click on the magnifying glass icon underneath the network camera view. The control panel for the digital zoom appears. Disable the “Disable Digital Zoom” box and change the zoom factor with the slider.



Start / stop live image view

The live stream can be stopped (paused) or exited. In both cases, the live stream can be continued by pressing the play symbol.

Local recording

A recording on the local hard disk can be started or stopped here. You can configure the recording path under “Client Settings”.

Adjust the volume

Press to manually set the audio output level.

Audio On / Off

Talk

As long as this button is pressed, the audio signals from the PC are transmitted to the audio output of the network camera.

Microphone volume

Press to manually adjust the level for the audio input of the network camera.

Mute

Press to switch the audio input of the network camera on and off.

Full-screen

Activates the full-screen view. The live image on the network camera is shown on the entire screen.

5.2 Client settings

The user settings are saved on the local computer. The following settings are available:

Media Options Allow the user to disable the audio or video function.

Protocol Options Allows a connection protocol to be selected between the client and the server.
The following protocol options are available for optimising the application: UDP, TCP, HTTP.

The UDP protocol gives you a larger number of audio and video streams in real time. However, some data packets can be lost due to the large data volume in the network. Pictures may be unclear in this case.
The UDP protocol is recommended if you have no special requirements.

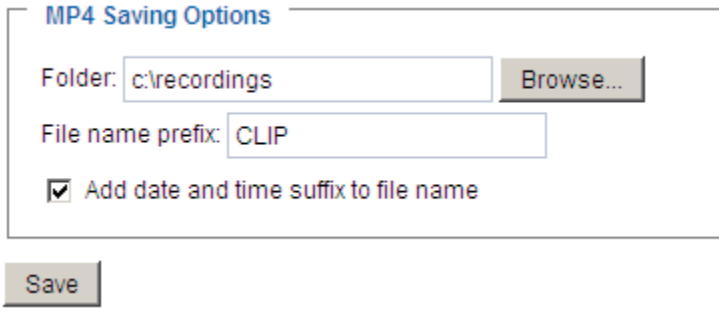
With the TCP protocol, fewer data packets are lost and the video display is more accurate. The disadvantage of this protocol is that the realtime stream is worse than with the UDP protocol.

Select the HTTP protocol if the network is protected by a firewall and only the HTTP port (80) is to be opened.

The selection of the protocol is recommended in the following order: UDP – TCP – HTTP.

MP4 Saving Options: Here, you can modify the data path to save the data immediately. Activating the “Add date and time suffix to filename” option generates files under the following name:

CLIP_20091115-164403.MP4
FileExtensionName_YearMonthDay-HourMinuteSecond.MP4

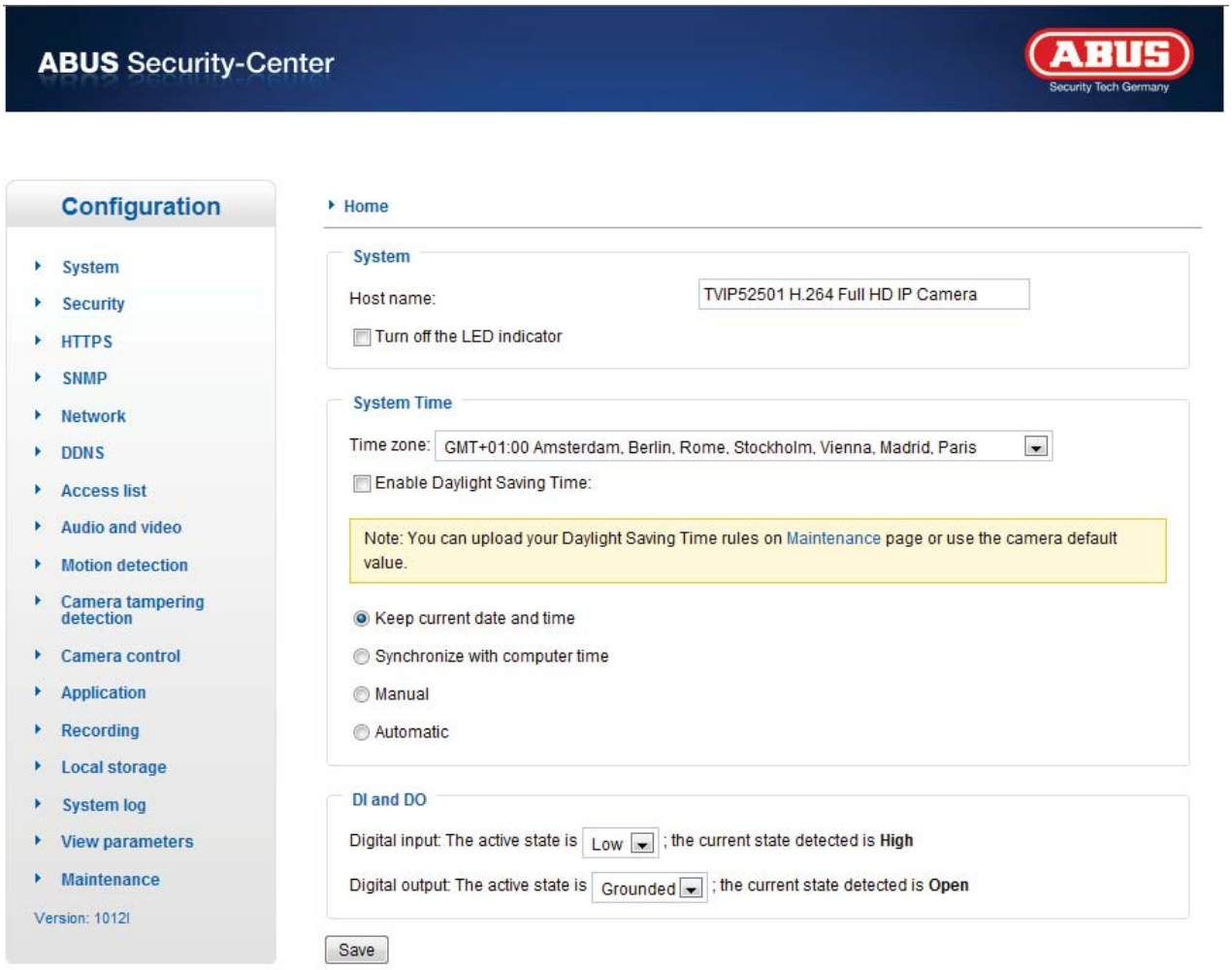


The recorded data can be played back using an MP4-compatible video player (e.g. VLC Media Player).

6. Administrator Settings

6.1 System

Only the administrator has access to the system configuration. The following sections explain each of the elements in the left-hand column. Specific tasks on the Options page are printed in bold. The administrator can enter the URL under the picture to go directly to the pictures page of the configuration.



“Host name” This is the text that is shown as the title on the main page.

“Turn off the LED indicator” Select this option to switch off the LED display on the network camera. This prevents other persons knowing that the network camera is in operation.

“Time Zone” Adjusts the time according to the selected time zone.

“Enable Daylight Saving Time” Activates daylight saving time settings in the network camera. The daylight saving time settings for every time zone are already saved in the network camera.

“Keep current date and time” Choose this option if you wish to keep the current date and time of the network camera. An internal realtime clock stores the date and time even after the system has been switched off due to a power cut.
“Synchronise with computer time” Synchronises the date and the time of the network camera with the local computer. The read-only date and time of the PC are displayed following the update.

“Manual” Sets the date and the time according to the administrator’s input. Note the date/time format when entering in the respective fields.

“Automatic” Synchronises the date and time with the NTP server via the Internet every time the network camera is switched on. This is not possible if the respective time server cannot be reached.

“NTP server” Assigns the IP address or the domain name of the time server. If you leave this text box empty, the network camera is connected to the default time servers.

“DI and DO” Sets the pre-defined state for the alarm input and relay output.

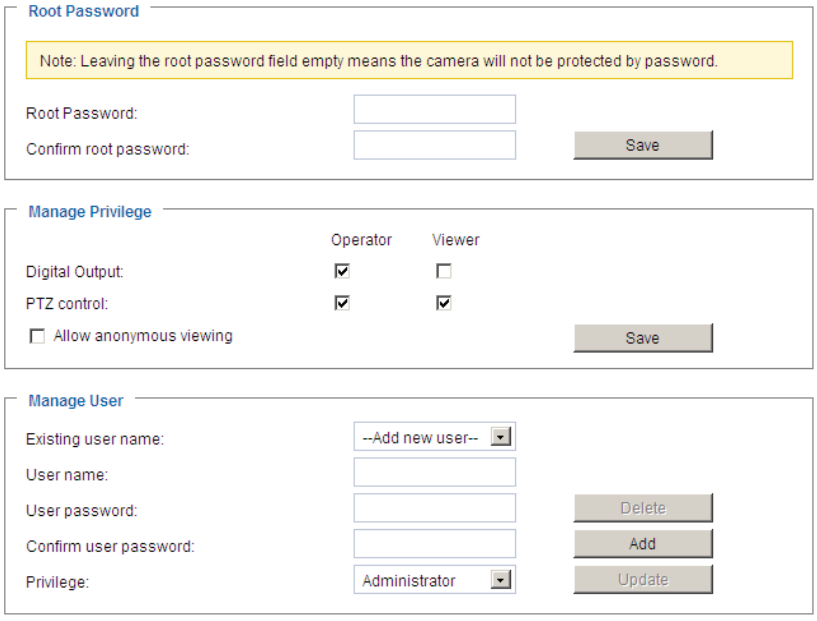
Do not forget to press **“Save”** in order for your changes to take effect.

6.2 Security

“Root Password” Allows users to change the administrator password by entering a new password. For security reasons, the passwords entered are shown as asterisks. After **“Save”** is clicked, the web browser prompts the administrator to enter the new password for accessing the network camera.

“Add new user” Enter the new user name and password and click **“Add”**. The new user is displayed on the list of user names. Up to twenty user accounts can be configured.

“Edit users” Open the list of user names, select the user that you wish to edit, and change the required values. To apply the changes, click **“Update”**.



“Delete user” Open the list of user names, select a user and click **“Delete”**, to delete this user from the list.

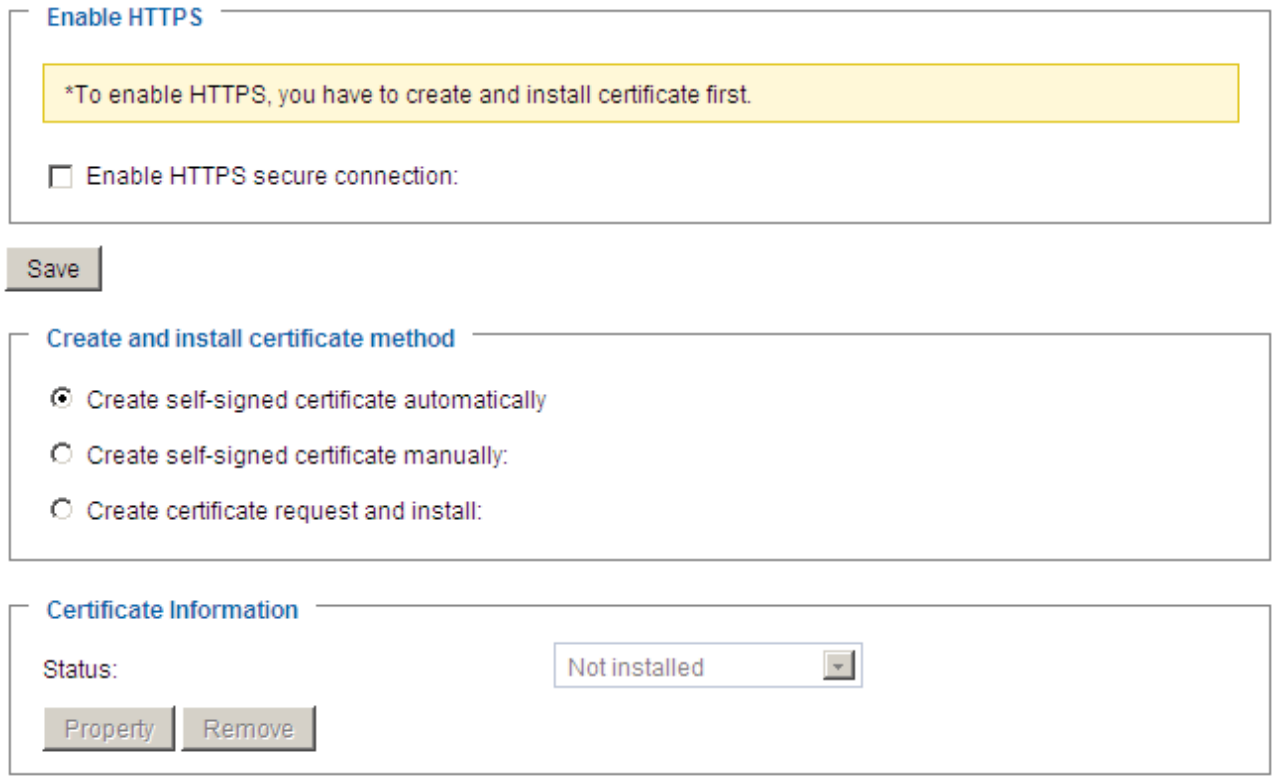
User administration

Administrator: Complete unrestricted access to the network camera.
Operator: No access to the configuration page. Can also execute URL commands (e.g. PTZ).
User: Access is restricted to the main page (live view).

Digital Output: The user group can control the alarm input and output.
PTZ control: The user group has access to the PTZ control.
Allow anonymous viewing: There is no prompt for a user name and password when the main page is displayed.

6.3 HTTPS

The HTTPS
protocol is used for encryption and for authenticating communication between the web server (network camera) and browser (client PC) on the Internet. All data transmitted between the network camera and client PC is encrypted using SSL. Apart from SSL encryption (compatible with all standard browsers), a source authorisation certificate is required in order to use HTTPS.



“Enable HTTPS secure connection” You can choose between unencrypted (HTTP) + encrypted (HTTPS) access or encrypted (HTTPS) access only.

If a secure HTTPS connection is enabled, the network camera can be accessed using the following lines:
https:\\“IP-Adresse”
If you wish to stream using the HTTPS connection, use the following link:
https:\\“IP-Adresse”:“HTTPS-Port\Live.sdp

Creating and installing a certificate

“Create self-signed certificate automatically” The pre-defined certificate in the network camera is used. With this option, no settings can be made by users.

“Create self-signed certificate manually” A new certificate is generated. Specific data must be entered.

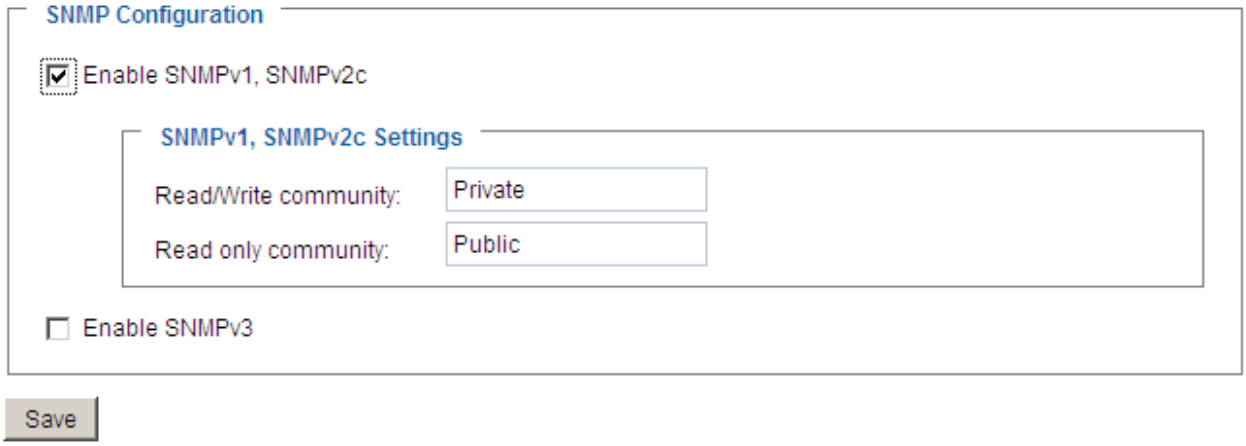
“Create certificate request and install” Select this option if you wish to generate a certificate request which is then submitted to a certificate authority. A certificate issued by a recognised certification authority (e.g. VeriSign) can also be installed on the network camera.

Note: When using a “self-signed certificate”, you may receive a warning message from your browser. Self-signed certificates are always classed as insecure by the browser as the source certificate and authorisation of the certification authority are both absent.

6.4 SNMP

The Simple Network Management Protocol is a network protocol that can be used to monitor and control network devices (e.g. routers, servers, switches, printers, computers etc.) from a central station. Here, the Protocol controls the communication between the monitored devices and the monitoring station. Enable this function if you are using an SNMP management server in your network. You can also access software solutions that can be installed on your PC system.

“Enable SNMPv1, SNMPv2c” Depending on your SNMP server settings, you can define the name fields of the read/write community here.



“Enable SNMPv3” If your SNMP server supports the SNMP protocol in version 3, you can execute the status query with encryption. To do this, an encryption algorithm and password for the read/write community status query must be saved in the network camera and SNMP server.

6.5 Network

6.5.1 Network settings

All changes made on this page cause the system to restart in order for the changes to take effect. Make sure that the fields are correctly filled before you click “Save”.

“LAN” The default is LAN. Use this setting if the network camera is connected to a LAN. You also have to make other settings such as the IP address or the subnet mask.

“Obtain an IP address automatically” Every time the network camera is restarted, it is assigned an IP address via a DHCP server.

“Use fixed IP address” The network data is fixed here, e.g. the IP address.

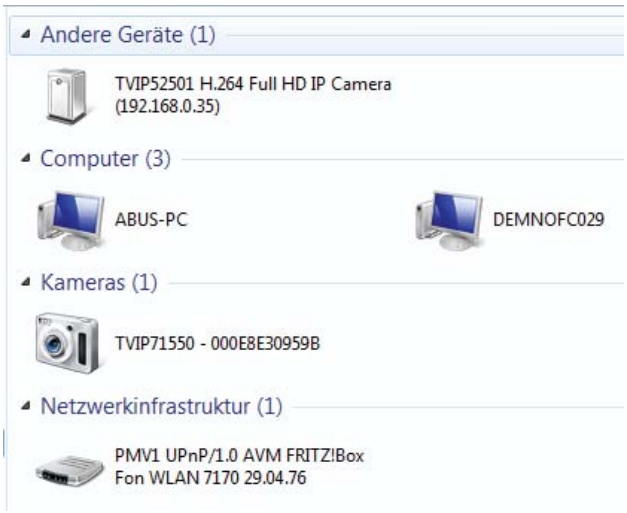
“IP address” This is required for network identification.

“Subnet mask” This defines whether the destination is in the same subnet. The default value is **“**255.255.255.0”.

“Standard-Router” Gateway for transmitting pictures to another subnet. An invalid router setting prevents transmission to these destinations in different subnets. If a cross-link cable connection is available, you must enter an IP which is in the same subnet range as the network camera (e.g. 192.168.0.1).

“Primary DNS” Server of the primary domain name with which the hostnames are converted into IP addresses.

“Secondary DNS” Server of the secondary domain name for generating a reserve copy of the primary DNS.
“Use UPnP” This enables Universal Plug and Play. If your operating system supports UPnP, the network camera can be accessed directly via UPnP management (Windows: network environment)



Make sure that the option “Use UPnP” is always enabled. UPnP is also used by eytron VMS to search the network camera.

“UPnP port forwarding ON” Enables Universal Plug and Play port forwarding for network services. If your router supports UPnP, then port forwarding for video streams is activated automatically on the router for the network camera using this option.

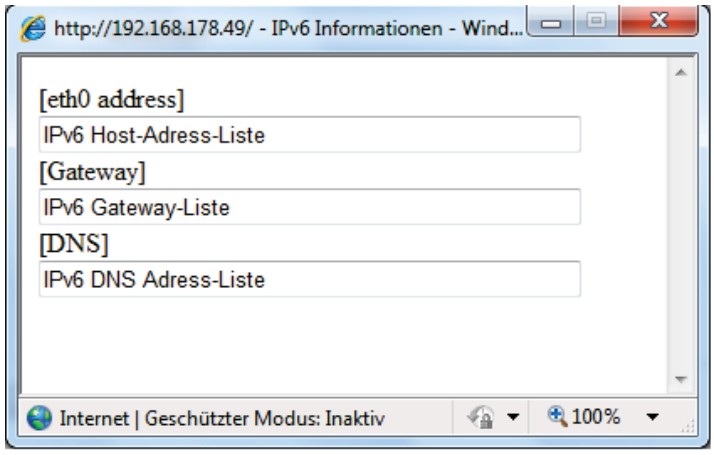
“PPPoE” Use this setting if the network camera is connected directly to a DSL modem. You will receive a user name and password from your ISP (Internet Service Provider).

“IPv6” Use this function to work with IP addresses of generation v6.

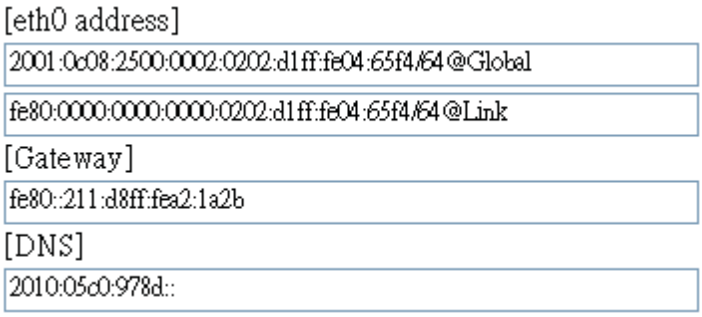
Please note that your network and hardware must support IPv6.

If IPv6 is enabled, the network camera always waits until it is assigned an IPv6 address via DHCP.
If no DHCP server is available, set up the IP address manually.
To do this, enable “Manually setup the IP address” and enter the IP address, default router and DNS address.

“IPv6 Information” All the IPv6 information is displayed in a separate window.



If the IPv6 settings are correct, you can read all the settings in the lower window.



6.5.2 IEEE 802.1x

Activate this function if your network environment uses the standard IEEE 802.1x, a port-based access control in the network.
IEEE 802.1x improves the security of local networks.
A connection is only permitted if all certificates between the server and “client” have been verified. They are authenticated by a switch/access point, which sends queries to the RADIUS authentication server.
Otherwise no connection is made and access to the port is denied.

Please note that your network components and the RADIUS server must support the standard IEEE 802.1x.

6.5.3 HTTP

“HTTP port” This port can be different from the standard port 80 (80, or 1025 – 65535). If this port is changed, users must be informed to ensure a successful connection. Example: If the administrator changes the HTTP port of the network camera with the IP address 192.168.0.99 from 80 to 8080, users have to enter “http://192.168.0.99:8080” in the web browser instead of “http://192.168.0.99”.

“Secondary HTTP port” Additional HTTP port for the network camera access

For the direct access to individual video streams over the web, the following access names can be configured. Access is gained via compressed JPEG images and allows web browsers (Firefox, Netscape) which cannot process ActiveX plug-ins to access the video stream directly:

“Access name for stream 1” Access name for the MJPEG stream 1
“Access name for stream 2” Access name for the MJPEG stream 2
“Access name for stream 3” Access name for the MJPEG stream 3
“Access name for stream 4” Access name for the MJPEG stream 4

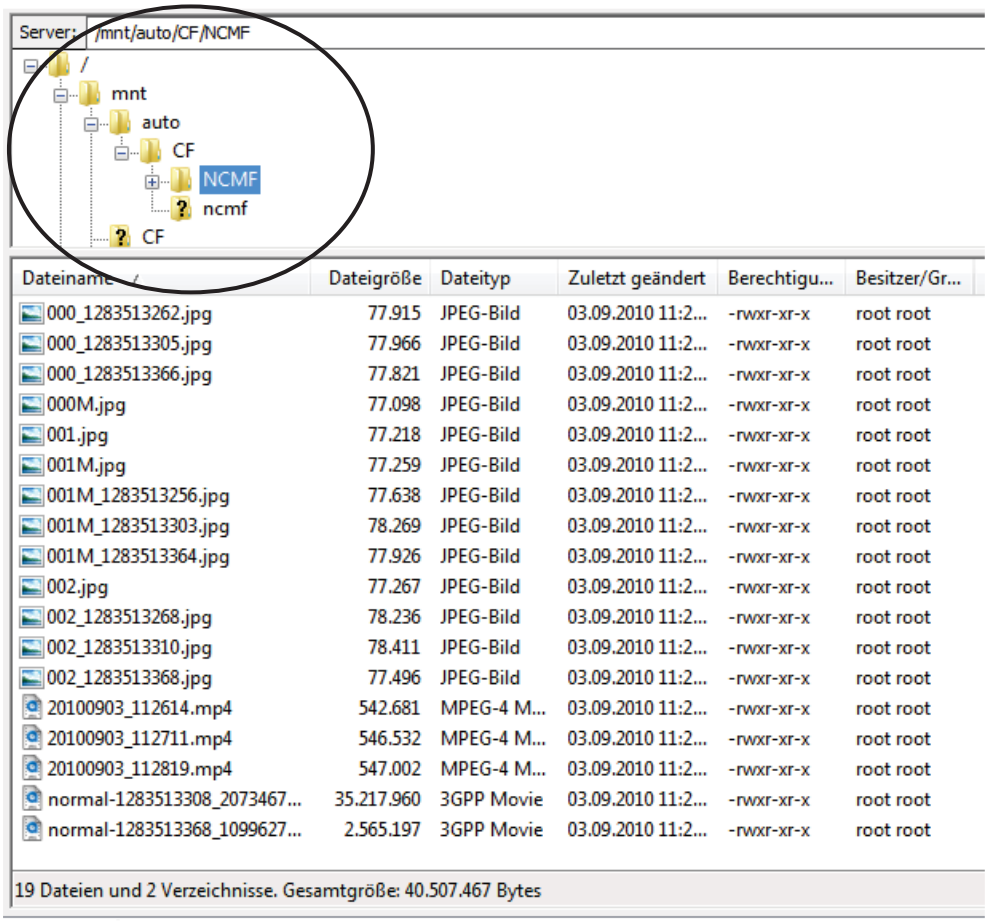
Note: Internet Explorer does not support the display of MJPEG images without Active

6.5.4 FTP

“**FTP port**” This is the internal FTP server port. It can be a different port to the standard port 21 (21, or 1025 – 65535). The video data saved on the network camera can be called up directly via FTP. Use a separate FTP program for this purpose.

The address format for entering the connection data is as follows:
Server: IP address of the network camera
User name: Administrator user
Password: Password of administrator
Port: FTP port of the network camera

Example (with FTP program)
Server: 192.168.0.99
User name: root
Password: admin
Port: 1026


Server: /mnt/auto/CF/NCMF
/
mnt
auto
CF
NCMF
ncmf
CF
Dateiname
Dateigröße
Dateityp
Zuletzt geändert
Berechtigu...
Besitzer/Gr...
000_1283513262.jpg 77.915 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
000_1283513305.jpg 77.966 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
000_1283513366.jpg 77.821 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
000M.jpg 77.098 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
001.jpg 77.218 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
001M.jpg 77.259 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
001M_1283513256.jpg 77.638 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
001M_1283513303.jpg 78.269 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
001M_1283513364.jpg 77.926 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
002.jpg 77.267 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
002_1283513268.jpg 78.236 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
002_1283513310.jpg 78.411 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
002_1283513368.jpg 77.496 JPEG-Bild 03.09.2010 11:2... -rwxr-xr-x root root
20100903_112614.mp4 542.681 MPEG-4 M... 03.09.2010 11:2... -rwxr-xr-x root root
20100903_112711.mp4 546.532 MPEG-4 M... 03.09.2010 11:2... -rwxr-xr-x root root
20100903_112819.mp4 547.002 MPEG-4 M... 03.09.2010 11:2... -rwxr-xr-x root root
normal-1283513308_2073467... 35.217.960 3GPP Movie 03.09.2010 11:2... -rwxr-xr-x root root
normal-1283513368_1099627... 2.565.197 3GPP Movie 03.09.2010 11:2... -rwxr-xr-x root root
19 Dateien und 2 Verzeichnisse. Gesamtgröße: 40.507.467 Bytes

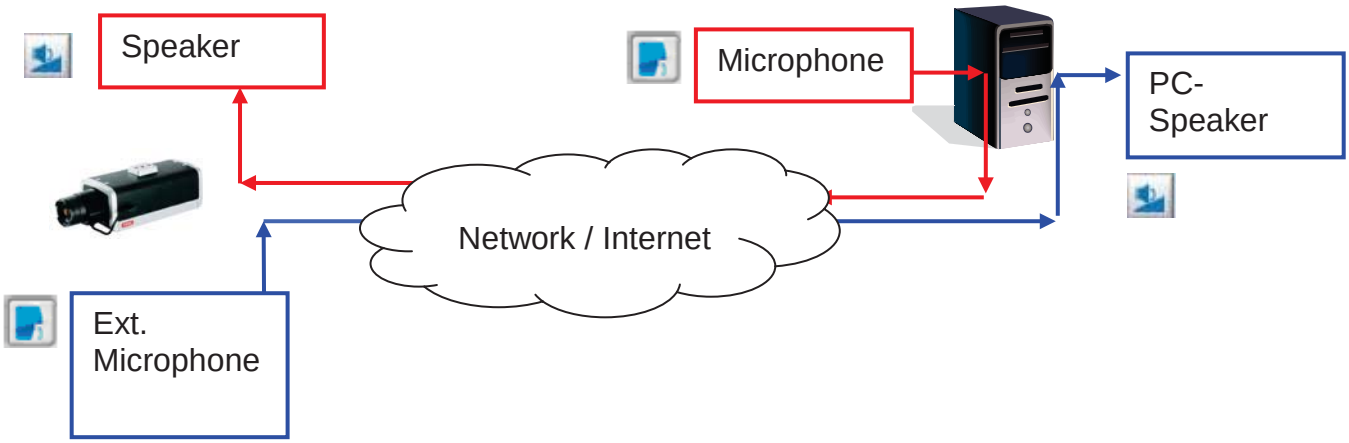
6.5.5 HTTPS

“HTTPS port” This is the port setting for the internal HTTPS port. It can be a different port to the standard port 443 (443, or 1025 – 65535). You can find further configuration options for HTTPS in section 5.5.3.

6.5.6 Two-way audio

“Two-way audio” This is the port for the two-way audio function. This port can be different from the standard port 5060 (5060 or 1025 – 65535).

To be able to use the two-way audio function, you must enable **“Video and audio”** for the selected video stream MPEG-4/H.264. MJPEG only supports the transmission of video data and is therefore not suitable for this function.



Live stream functions:

Start the audio data transmission.

Control the sensitivity of the network camera audio input.

Switch off the microphone/audio input.

Click the button again to stop the audio transmission.

6.5.7 RTSP transmission

“RTSP authentication” The authentication options are: disable (standard), basic (simple) or an expanded mode (digest).

I If the RTSP authentication is enabled, the user name and password of a valid user (e.g. administrator) must be entered during the RTSP connection setup.
IMPORTANT: The RTSP authentication must be supported by the video player (e.g. Realplayer 10.5).

“Access name for stream 1” This is the access name 1 for establishing a connection from a client. The codec type must be MPEG4. Use
rtsp://<IP address>:RTSP port /<access name 1>, to establish a connection.

“Access name for stream 2” This is the access name 2 for establishing a connection from a client. The codec type must be MPEG4. Use
rtsp://<IP address>:RTSP port /<access name 2>, to establish a connection.

“Access name for stream 3” This is the access name 3 for establishing a connection from a client. The codec type must be MPEG4. Use
rtsp://<IP address>:RTSP port /<access name 3>, to establish a connection.

“Access name for stream 4” This is the access name 4 for establishing a connection from a client. The codec type must be MPEG4. Use
rtsp://<IP address>:RTSP port /<access name 4>, to establish a connection.
RTSP access with VLC:
rtsp://192.168.0.99:10052/live.sdp

“RTSP port” This port can be different from the standard port 554 (554; or 1025 to 65535). If you change it, note that the input format is analogue to the HTTP port.

“RTP port for video” This port can be different from the default port 5558. The port number must always be even.

“RTCP port for video” This port must be the “RTP port for video” plus 1.

“RTP port for audio” This port can be different from the default port 5556. The port number must always be even.

“RTCP port for audio” This port must be the “RTP port for audio” plus 1.

6.5.8 Multicast transmission

Multicast is the message transmission from a single point to a group (also known as a multiple-point connection). The advantage of multicast is that messages can be transmitted simultaneously to several recipients or a closed user group without the bandwidth of the sender increasing according to the number of recipients. When using multicast, the sender only requires the same bandwidth as a single recipient. The packets are multiplied on each network distributor (switch, router).

Multicast allows data to be sent efficiently to many recipients at the same time in IP networks. This is made with a special multicast address. In IPv4, the address range 224.0.0.0 to 239.255.255.255 is reserved for this purpose.

The following multicast settings can be configured for streams 1 - 4 in the network camera.

Enable **"Always multicast"** to use multicast.

"Multicast group address" Specifies a group of IP hosts which belong to this group

"Multicast video port" This port can be different from the default port 5560. The port number must always be even.

"Multicast RTCP video port" This port must be the "Multicast video port" plus 1.

"Multicast audio port" This port can be different from the default port 5562. The port number must always be even.

"Multicast RTCP audio port" This port must be the "Multicast audio port" plus 1.

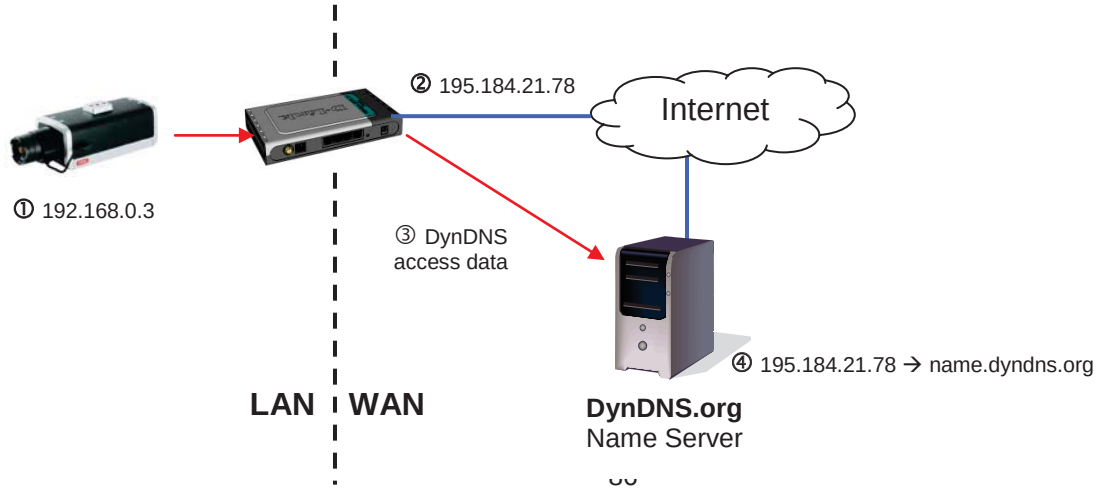
"Multicast TTL" Time to Live

If you are setting up port forwarding in a router, all ports should always be forwarded this way (RTSP + HTTP). This is imperative for successful communication.

7. DDNS

DynDNS or DDNS (Dynamic Domain Name System) is a system used for updating domain name entries in real time. The network camera is equipped with an integrated DynDNS client, which updates the IP address independently via a DynDNS provider. If the network camera is positioned behind a router, we recommend using the DynDNS function on the router.

The following diagram offers an overview of accessing and updating the IP address using DynDNS.



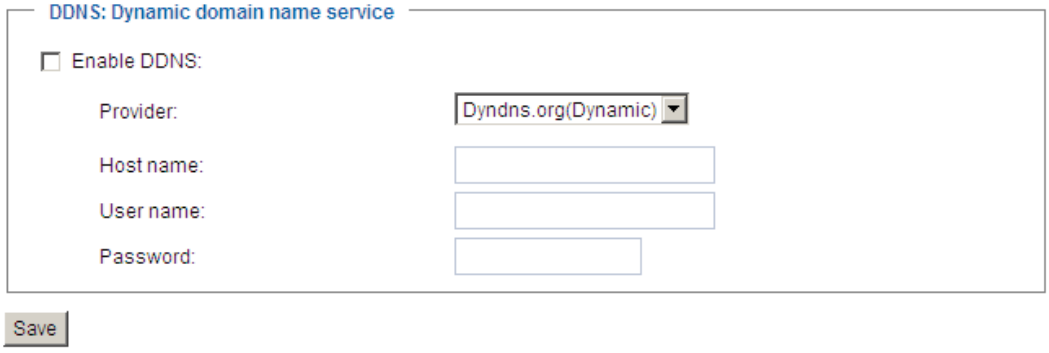
“Enable DDNS” Enables the DDNS function.

“Service providers” The provider list contains the hosts that provide DDNS services. Connect to the service provider’s website to make sure that the service is available.

“Host name” This field must be completed if you want to use the DDNS service. Enter the host name registered with the DDNS server.

“User name/email” The user name and the email address must be entered in this field to set up a connection to the DDNS server or to inform users about the new IP address. Note: If you enter a “User name” in this field, you must enter a “Password” in the next field.

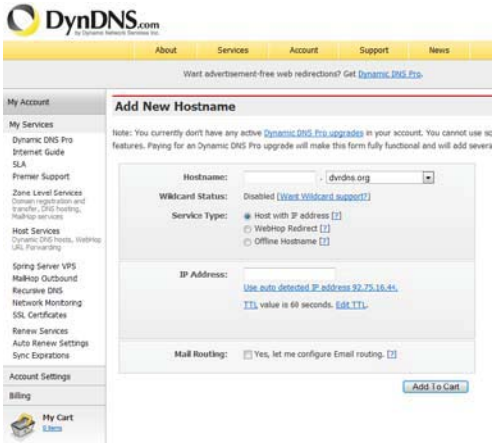
“Password” To be able to use the DDNS service, enter your password in this field.



7.1 Setting up a DDNS account

Set up a new account at DynDNS.org

Save the account information

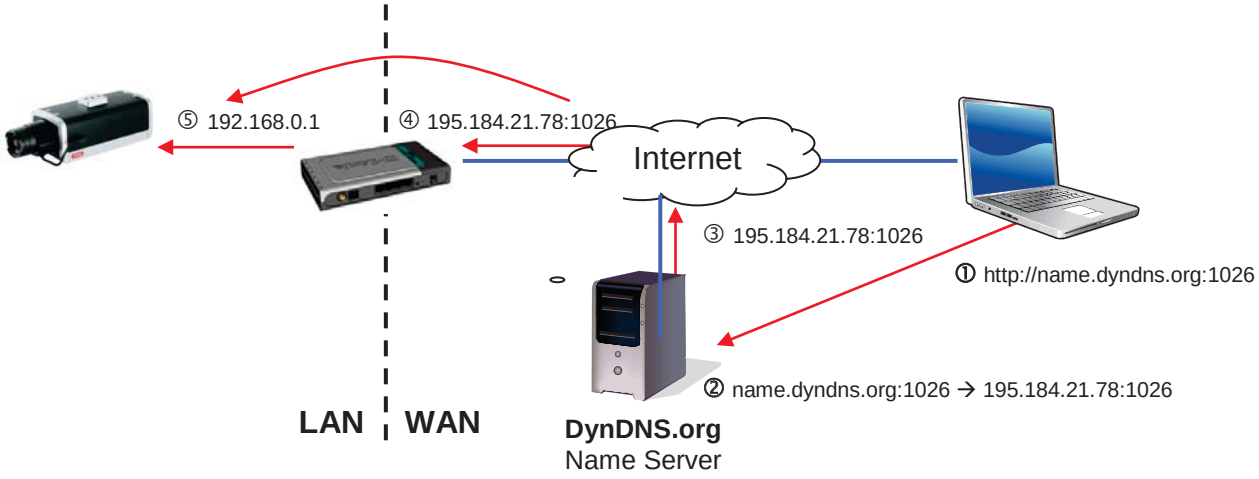


Note down your user data and enter this into the configuration of the network camera.

7.2 DDNS access via a router

If your network network camera is positioned behind a router, then access via DynDNS must be configured in the router. A description of the DynDNS router configuration for common router models can be found on the ABUS Security-Center website: www.abus-sc.com.

The following diagram offers an overview of accessing a network camera behind a router via DynDNS.org.



Port forwarding of all relevant ports (at least RTSP + HTTP) must be set up in the router in order to use DynDNS access via the router.

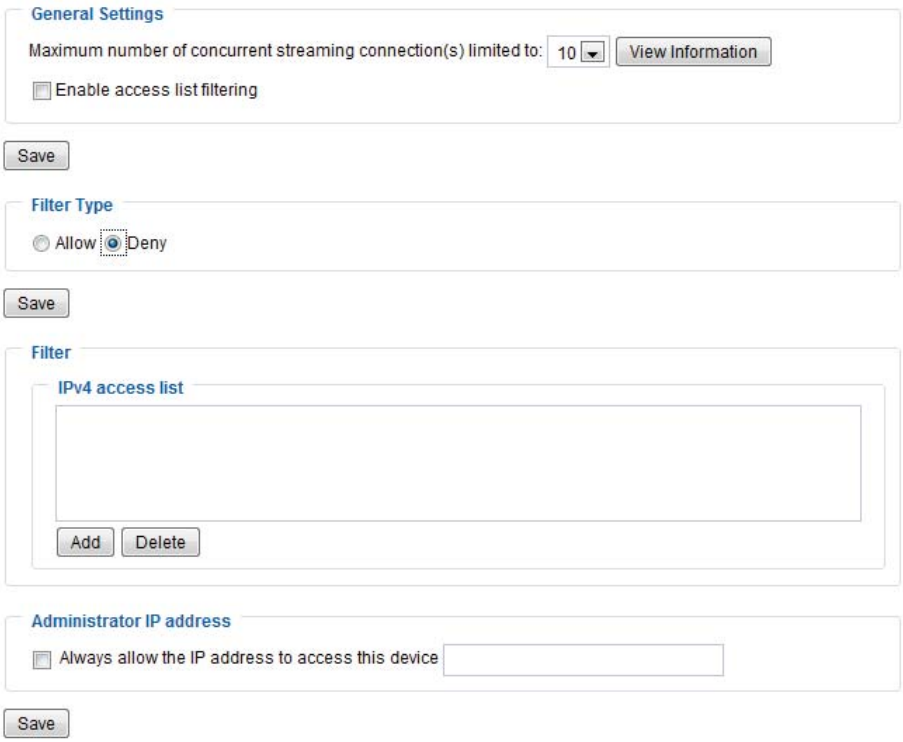
8. Access list

This is where you control access to the network camera using IP address lists.

"Maximum number of concurrent streaming connection(s) limited to" Number of possible simultaneous connections to the network camera. Depending on the bandwidth available for the network camera, it may make sense to limit the access.
"Enable access list filtering" Enables the IP address filters listed defined under "Filters"
You have two options for defining IP address filtering:

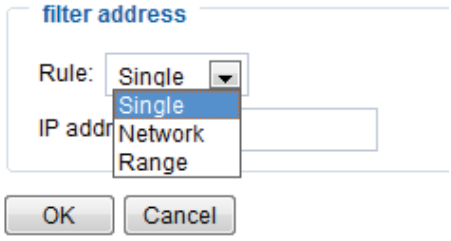
- "Allow" filter type: only IP addresses in the defined address space have access, or
- "Deny" filter type: IP addresses in the defined address space have no access.

Click **"Add"** to configure the address ranges. The following configuration options are given:



Rule: Single, Range, Network:

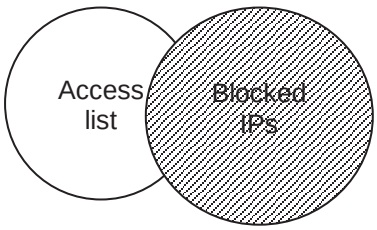
- Single: a specific IP address is added
- Range: IP address ranges from - to can be defined
- Network: IP addresses with a specific subnet mask can be defined



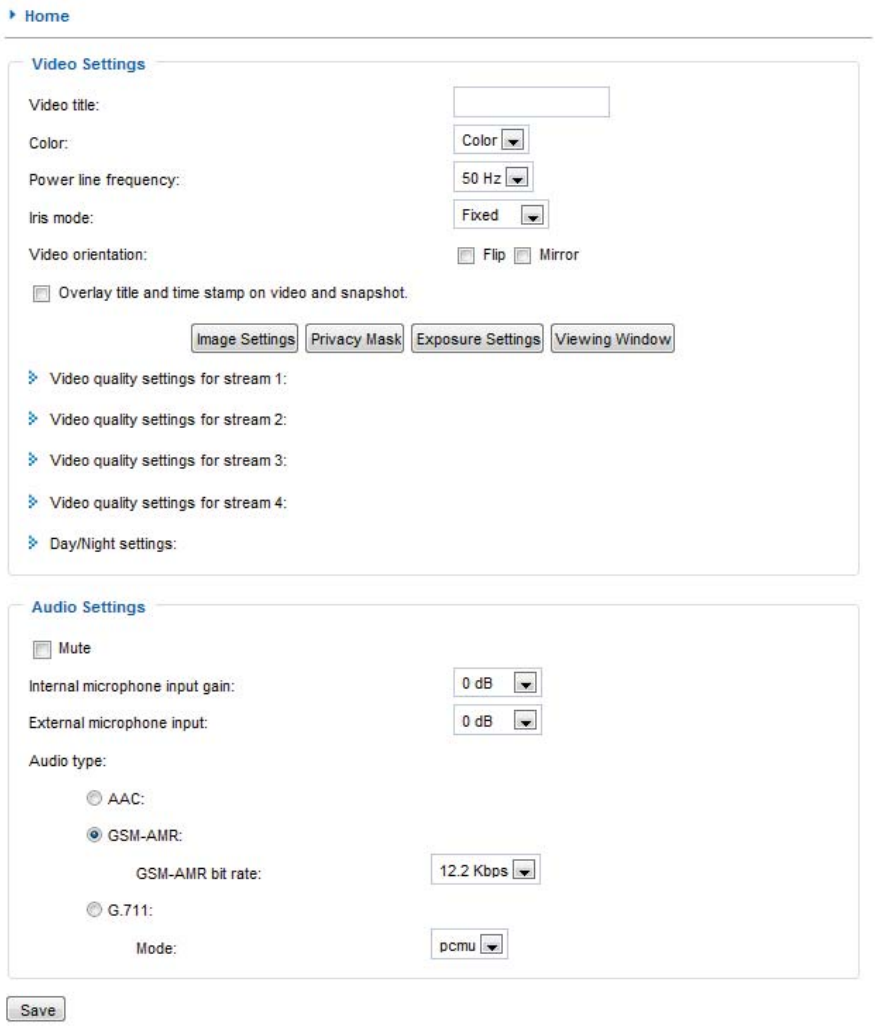
Example:
The IP address range from 192.168.0.1 to 192.255.255.255 should be permitted.
The following IP addresses should be blocked 192.168.1.0 to 192.168.255.255.

Result:
Access is only granted for IPs from the following range: 192.168.0.1 – 192.168.0.255.

An intersection is formed between IPs which are allowed access and denied access.



9. Audio and Video



"Video title" The text appears in the black bar above the video window with a timestamp. This timestamp (date and time) is provided by the integrated realtime clock of the network camera.

"Colour" Choose between colour and black and white display.

"Modulation" Select between the video standard NTSC and PAL or automatic video signal recognition via the network camera.

"Select caching stream" The selected video stream is used for recording the pre- and post-alarm video data (see "Application" section).

"Flip" Rotates the video horizontally. Select this option if the camera has been installed upside down.

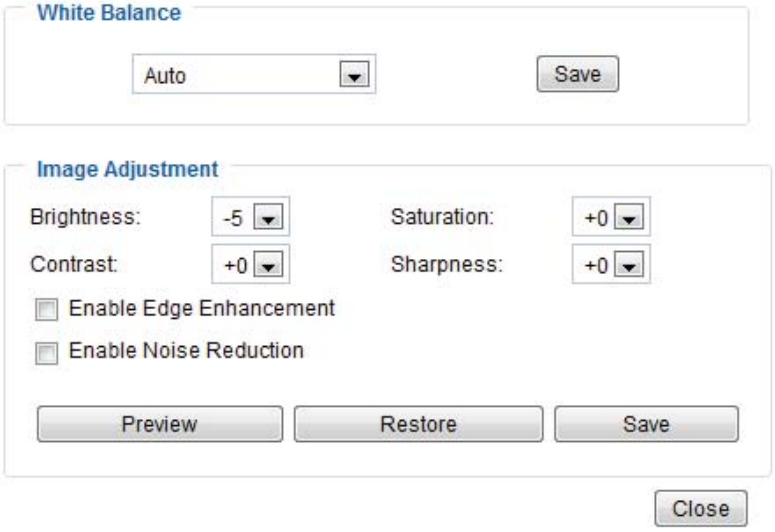
"Mirror" Rotates the video vertically.

Select the flip and mirror options if the camera is installed on the ceiling.

"Overlay title and time stamp on video and snapshot" You can use this option to display the title and time stamp directly in the video image and snapshots. The input for "Video title" is used here.

9.1 Image Settings

„**White Balance**“: Here you can set manually the colour temperature for the white balance:



Auto: The camera automatically selects the ideal colour temperature depending on the light conditions. This setting is recommended for most situations.

“**Keep current value**” The white balance values of the current live picture are used

„Brightness, Contrast, Saturation, Sharpness“:
Here you can optimize the video imiage depeding on the situation.

“Enable Edge Enhancement”:
Edge enhancement is an image processing filter that enhances the edge contrast of an image or video to improve its sharpness. Enter a value from 1 to 128 to set the degree of enhancement desired.

“Enable Noise Reduction”:
Noise reduction is the process of removing noise from a signal. Select the type of noise to remove and enter a value from 1 to 63 to set the degree of enhancement required.

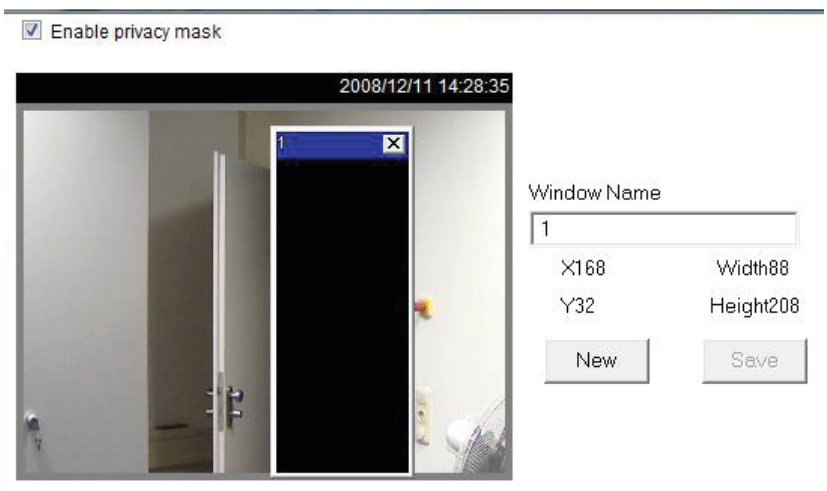
In order to see the changed settings click the „Preview“ button. To change the settings press the “Save” button. In order to discard the settings press the „Restore“ button.

9.2 Privacy masking zones

This function allows you to hide areas in the video image. You can select 5 areas of any size.

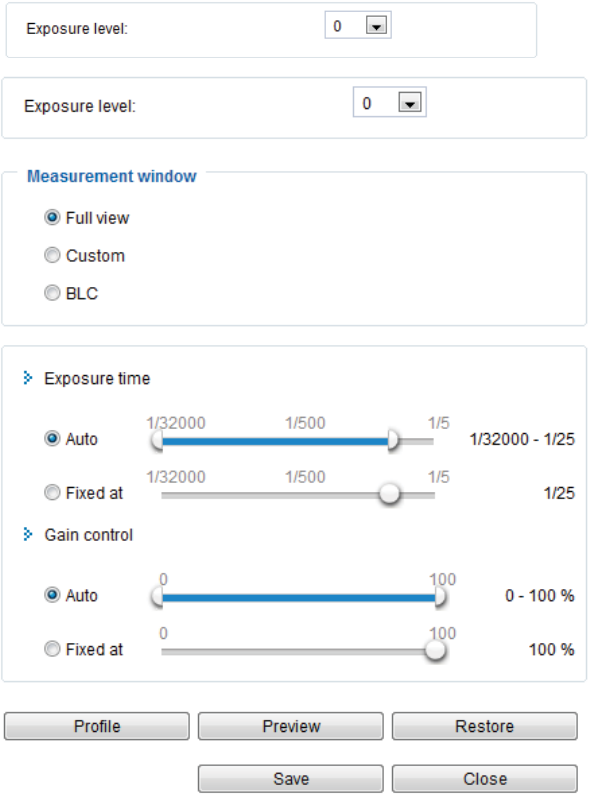
Enable this function by selecting the **“Enable privacy mask”** option.

Click **“New”** to create a new window; you can then adjust the size. Click **“Save”**, to apply the changes.



This function should not be enabled if the PTZ/ePTZ function of the camera is being used. This function can only be configured if MS Internet Explorer is used as a browser (ActiveX mode).

9.3 Exposure Settings



With this function you can set specified exposure settings from the CMOS-Sensor of the camera.

„Exposure level“ Sets the default value of the aperture. The higher the value the brighter the picture.

„Measurement window“:

„Full view“
The camera takes the overall video image as reference for exposure settings.

„Custom“
You can add manually customized windows as inclusive or exclusive regions. The camera uses this windows as reference for exposure settings.
„Add inclusive window“
The camera inludes this window for exposure settings.
To change the format of window simply modify it with the mouse.
„Add exclusive window“
The camera ignores this window for exposure settings.
To change the format of window simply modify it with the mouse.

„BLC“
A predefined window will be used for exposure settings.
Back light compensation improves the recognition of objects in front of ligth sources.

„Exposure time“

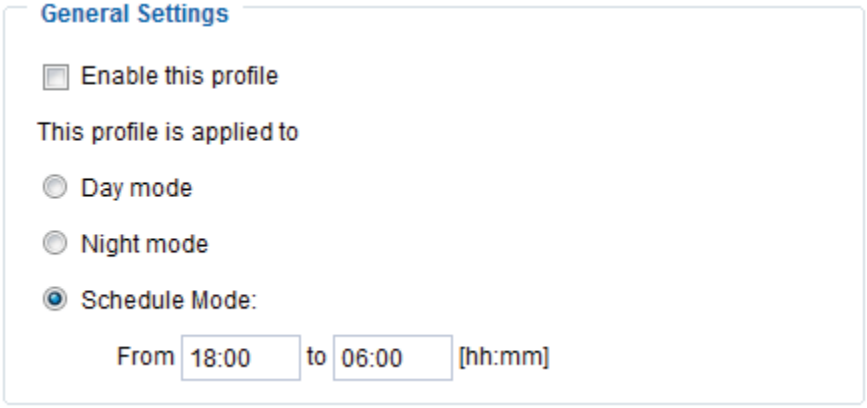
The shorter the time is set, the less light will be applied to the sensor and the image becomes darker. The picture sharpness during fast movements decreases because of longer exposure time.
You can either define an area in which the camera automatically adjust the exposure time or fix the value.To set the zone please use the mouse.

„Gain control“

In low light conditions more image details can be shown. Depending on the configured value, a better image quality in a dark room can be achieved.
You can either define an area in which the camera automatically adjusts the gain or fix the value.
To set the zone please use the mouse.

Usage of Sensor profiles:
The network camera supports different sensor profiles, depending on situation or time. Next to the standard profile following can be configured:

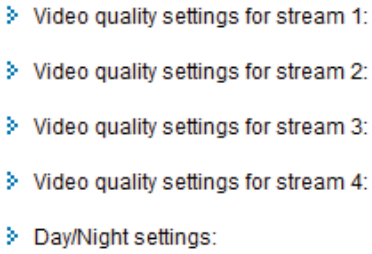
- Day: Use this profile if the network camera is installed at a location with permanent daylight conditions.
- Night: Use this profile if the network camera is installed at a location with permanent low light conditions.
- Schedule: Here you can select a schedule. The settings will only be active within this timeframe.



9.4 Basic setting:

Video options

The network camera has four video streams with different quality settings available for flexible application.


Video quality settings for stream 1:
Video quality settings for stream 2:
Video quality settings for stream 3:
Video quality settings for stream 4:
Day/Night settings:

Settings for streams 1, 2, 3 and 4
You can configure streams 1 – 4 in the respective menus.

The quality settings for stream 4 is determined on QCIF. Use stream 4 for streaming on mobile devices.

“Image compression” Select from H.264/MPEG-4/MJPEG.
“Image size” Select your desired resolution here.
“Max. image rate” Select your maximum refresh rate here.
“Key frame interval” Determines how often an Intra Frame is generated. The shorter the interval, the better the image quality, and the higher the network usage costs.
“Video quality fixed image rate” Sets the image rate at a constant value. The image quality is reduced the more complex an image is (e.g. motion).
“Fixed image quality” Sets the image quality at a constant value. The bit rate increases with the image complexity (e.g. motion).

Compression ⟶ / Recording duration ↓	H.264	MPEG-4	MJPEG
1 minute video sequence in Full HD resolution with “good” quality	Approx. **30** MB	Approx. **55** MB	Approx. **220** MB
Storage capacity **32 GB** SD card	Approx. **18** hours	Approx. **10** hours	Approx. **2,5** hours

At the end of the manual you can find a detailed table with every quality setting combined with every resolution.

Day/Night settings:

„Switch to B/W in night mode “: Here you can switch the network camera to b/w mode.

„IR cut filter“: There are following option to switch the IR cut filter:

- Auto: Automatic switching from colour to b/w below 2 Lux.
- Schedule mode: Automatic switching from color to b/w at fixed times.
- Day mode: Manual activating of the day mode. The IR filter is switched to block all IR light.
- Night mode: Manual activating of the night mode. The IR filter is removed to allow IR light to pass and improve the image quality in low light conditions.
- Synchronize with digital input

9.5 Adjust image and viewing window

By clicking on **„viewing window“** you can configure the resolution for the video streams 1 to 3.

1. Select the stream you want to configure. Stream 4 always provides the full image area and is therefore not selectable
2. Select a resolution from the dropdown menu.

3. Adjust the image area to the ROI.
4. Save the settings.

Folgende maximale Einstellungen können gesetzt werden:

	Image area	Image size
Stream1	176x144 – 1920x1080	176x144 – 1920x1080
Stream2	176x144 – 1920x1080	176x144 – 1920x1080
Stream3	176x144 – 1468x1200	176x144 (fix)
Stream4	1920x1080 (fix)	1920x1080 (fix)

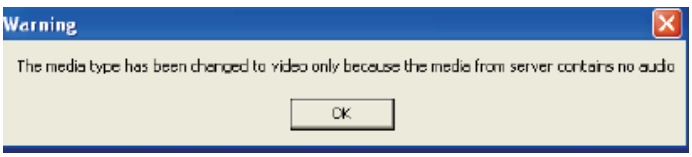
For viewing and recording the IP camera with eytron VMS always stream 1 is used.

The network camera functions using a 16:9 image sensor. If you select a 16:9 resolution under ROI, the live image displayed by the camera will be distorted by recording software or a recorder system, or may not be displayed at all. To solve the problem, you must set a 4:3 resolution in the network camera or ROI: 320x240, 640x480, 800x600 or 1024x768. This may involve cropping the periphery of the live image.

After setting up a ROI only this area will be displayed at live display as well as for RTSP access (e.g using VLC media player). By transmitting only the ROI bandwidth and storage space is saved.

9.6 Audio settings

“Mute” All audio functions in the network camera are deactivated. A note appears when you access the network camera.



“External microphone/audio amplification” Adjust the value from +21 db to -33 db.

“Audio type” Select the audio type and desired bit rate. A higher value requires more bandwidth:

- **“AAC”** (Advanced Audio Coding) Special codec for audio data compression under MPEG-4/H.264.
- “**GSM-AMR”** (Global System for Mobile Communications – Adaptive Multi Rate) Voice codec in GSM mobile telephone network.
- **“G.711”** pmca/pmcu (Pulse Code Modulation).

10. Motion detection

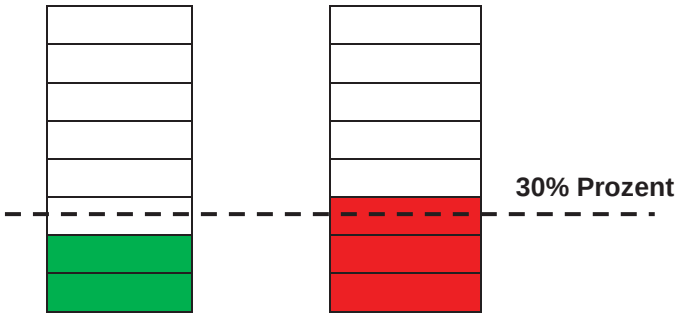
You can activate up to three motion zones in the network camera. Select "**Enable motion detection**", to configure the function.

The motion detection function is only active once you have defined an action under the "Application" menu item.

"**Window Name**" The text appears at the top of the window.
"**Sensitivity**" Sensitivity in changes of picture sequence (e.g.: sensitivity high: triggering by slight picture change).
"**Percentage**" Specifies the percentage of the image that has to change for the motion sensor to be triggered.

Click "New" to add a new window. To resize the window or move the title bar, click the window frame, keep the mouse button pressed and drag the window to the required size. Close the window by clicking the "x" in the top right corner.
Click "Save" to save the window settings. A bar graph rises or falls according to the picture variation.

A green bar means that the picture variation is below the surveillance level, whilst a red bar means that the picture variation is above the surveillance level. If the bar is red, the detected window appears with a red frame. When you return to the homepage, the monitored window is hidden. As soon as motion is detected, the red frame is displayed.



Green area: Motion recognised, however alarm is not triggered.
Red area: Picture variation (motion) exceeds the limit value of 30% and triggers an alarm.

Functionality of motion detection:

Two parameters are available for configuring motion detection: **Sensitivity** and **percentage**. The figure shows how these two parameters influence motion detection.

A motion occurs, shown in the progression from figure A to figure B. The resulting pixel changes (depending on the sensitivity setting) are shown in figure C (grey). The **"Sensitivity"** setting refers to the capacity of the sensor to detect motion in the picture. The higher the set value, the more pixel changes are detected in the picture. When motion is detected, the pixel changes (depending on the sensitivity setting) are saved on the server as alarm pixels (pink areas in figure D). The **"Percentage"** value describes the percentage of the "alarm pixels" in relation to the total number of pixels in the selected area. If the specified percentage of alarm pixels is reached or exceeded, an alarm is triggered. To ensure reliable motor detection, a high sensitivity setting and low percentage value is recommended.

11. Camera tampering detection

The network camera supports tampering detection. If detection is enabled, the alarm can be used as an event for a notification (see "Application").

"Enable network camera tampering detection" The sensor system is activated.

"Triggering behaviour" The period defines how long a tampering event must continue before an alarm is triggered.

The following tampering events are checked:

- Camera rotation
- Camera masking
- Camera defocussing

You can set tampering detection as a trigger in the camera function "Application/Event setup".

12. Camera control

There are two different options to control PTZ network cameras:

- Mechanical: Connect the Network Camera to a PTZ driver or scanner via RS485 interface.
- Digital: Digital PTZ (e-PTZ) within a certain image area.

RS485 Settings

„Disabled“: Function is deactivated.

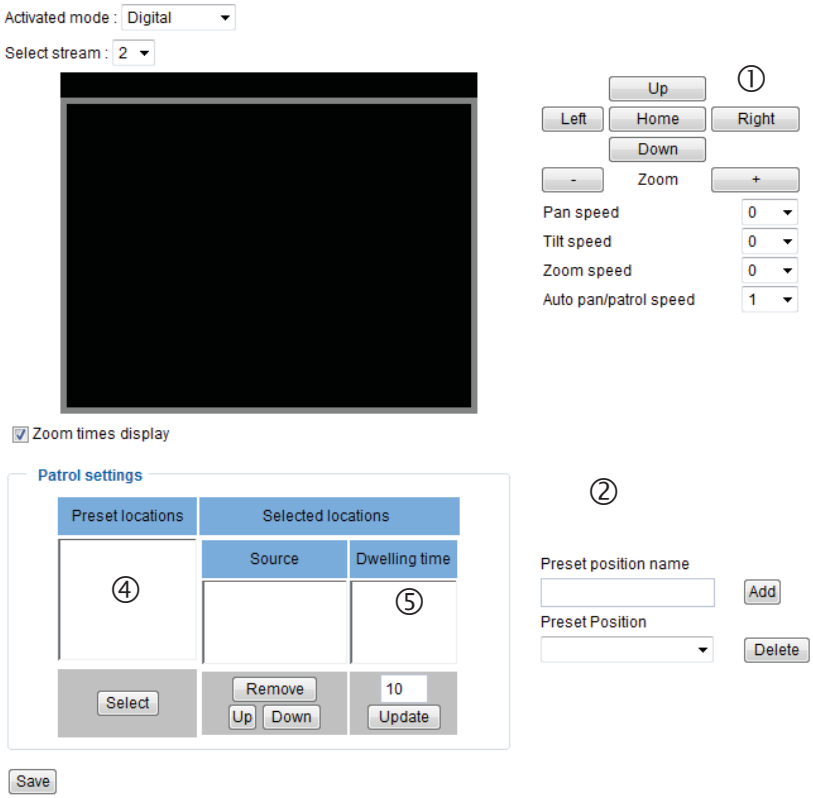
„PTZ camera“: This setting is required when connecting a motorized pan/tilt driver via RS485. Choose the corresponding protocol: Pelco-D, DynaDome/SmartDOME, Lilin PIH-7x00.

„Transparent HTTP Tunnel“: If your PTZ device accepts RS485 commands via network you can use this option. The necessary parameters you will find in the manual of the PTZ device.

Preset positions and tours

You can set up a maximum of 20 preset positions. Proceed as following:

1. By using the direction buttons position the camera tot he desired image area.
2. Enter a name for this preset. The name will be displayed in the preset list.
3. Repeat steps 1 to 3 to add further preset positions
4. To add presets to a tour mark these in the preset list and press „Select“.
5. Adjust the dwell time if necessary.
6. Save the settings.



If you are using the digital control there are further settings available:

„Select stream“: Adjust settings for the selected video stream.

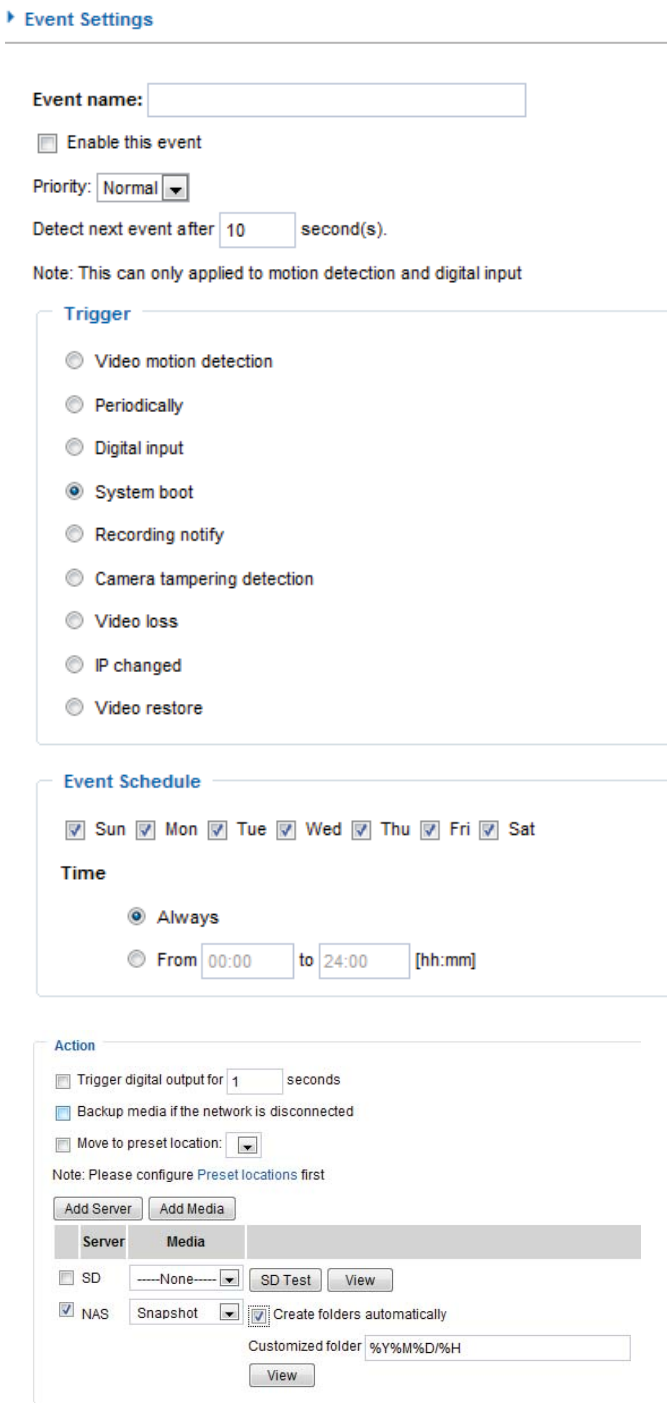
„Zoom times display“: Here you can choose if to display the zoom ratio into the live view image.

13. Application

This allows you to automate tasks in the network camera. The application configuration comprises 3 sections: event, server and medium. A typical application example may look like the following: due to motion detection (event), an email (server) with an alarm picture (medium) is sent to a user.

Event setup
Click **“Add”** to create a new event. Up to 3 events can be set.

“Event name” Assign a unique name to the event, under which the event configuration is to be saved
“Enable this event” Select this option to activate the programmed result.
“Priority” Events with higher priority are completed first
“Detect next event after” Time between events to be executed (e.g.: with motion detection)



13.1 Trigger settings

“Video motion detection” Activate the desired motion window.
“Periodically” The event is triggered periodically. Maximum setting is 999 minutes.
“Digital input” Triggered if a signal is present at the alarm input (e.g.: door contact).
“System boot” Event is triggered when the system is rebooted (after a power failure).
“Recording notify” If the destination storage (medium) is full or if a cyclic recording is overwritten, an alarm is triggered.
“Camera tampering detection” An alarm is triggered if the system detects that the connected analogue camera has been tampered with.
“Video loss” An alarm is triggered if the video signal is interrupted.
“IP changed” As long as a new IP address is assigned to the network camera, an alarm is triggered.
“Video restore” Triggered when the video signal is restored following a malfunction.

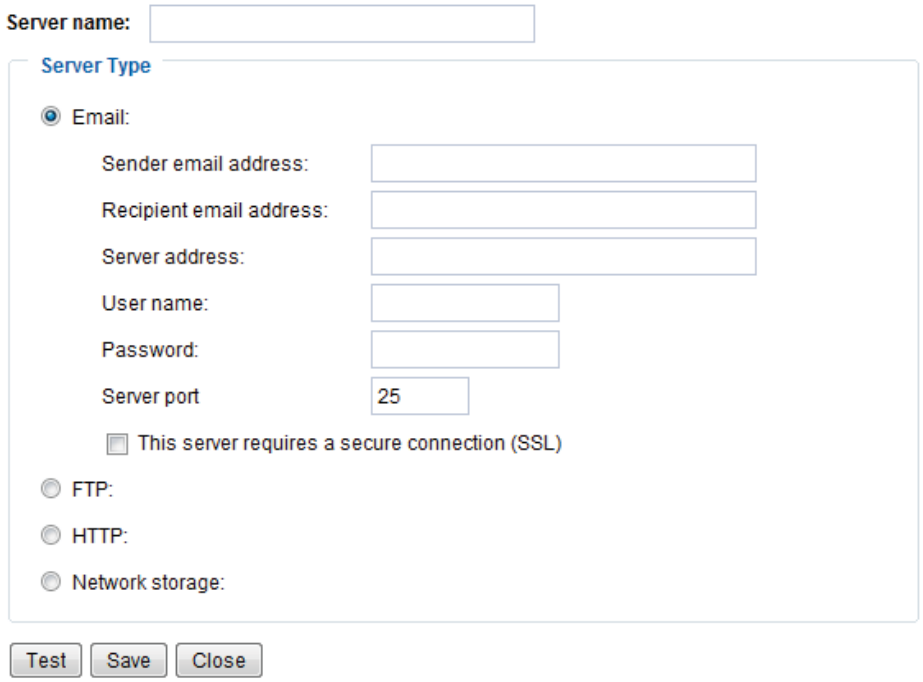
Event schedule

"**Sun**" – "**Sat**" allows you to select the day of the week for executing an event.
"**Always**" Activates the event at all times (24 hours).
"**From**" – "**to**" The event times are restricted.

13.2 Server configuration

You can save up to 5 servers in the network camera. Click **"Add"** to configure a new server. The server of type **"SD"** is pre-configured and defines the SD card unit as the destination for saving data. You can configure the following server types:

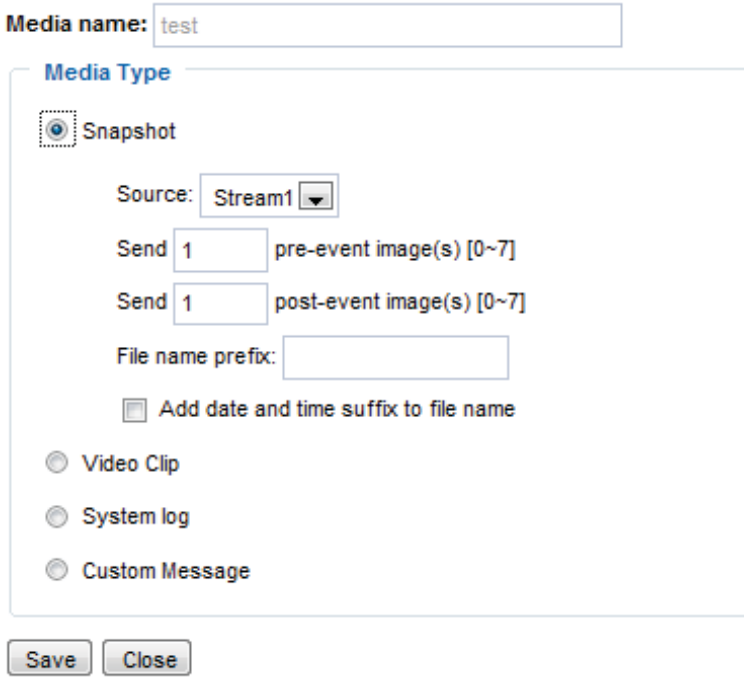
- Email: enter the access data here
- FTP: enter the access data here. Address convention: ftp.abus-sc.com
- HTTP: enter the access data here. Address convention: http://abus-sc.com/cgi-bin/upload.cgi
- Network storage: Address convention: \\192.160.0.5\NAS



Once you have entered the access data, save your settings. Before closing the window, it is advisable to execute a **"Test"**. The result is displayed in a new window of the browser.

13.3 Media settings

You can save up to 5 media settings in the network camera.



"**Media name**" Unique name for the medium.

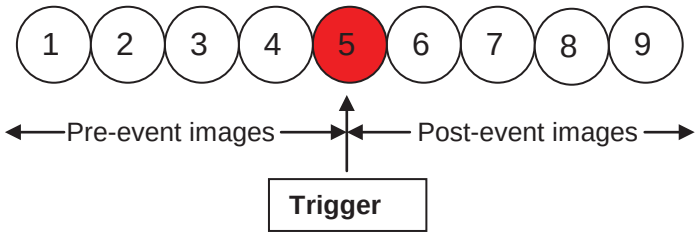
There are 4 different media types:

- Snapshot (JPEG file)
- Video clip (MP4 format)
- System log (TXT log)
- Custom message (TXT format)

Each medium that you create can only be linked with one event.
Assigning a medium twice results in the incorrect functioning of the network camera.
If you wish to use the same media type for two events, you must create two separate media types beforehand.

Snapshot

"**Source**" The recording can be made from video streams 1–4.
"**Send pre-event image(s)**" Number of snapshots before an event.
"**Send post-event image(s)**" Number of snapshots after an event.



“**File name prefix**” Enter a name that will prefix the snapshot file name.
“**Add date and time suffix to file name**” Adds the date and time to the snapshot so that you can more easily distinguish between the file names of snapshots either in sequential or event-controlled operation. Example: “video@20030102_030405.jpg” means that the JPEG picture was taken on January 2, 2003 at 03:04:05 (i.e., just after 3:04 am). If you omit this suffix, the file is updated with the name “video.jpg” on the external FTP server according to the specified time interval.

The data name is structured as follows:
Prefix_YYYYMMDD_HHMMSS : ABUS_20091115_164501

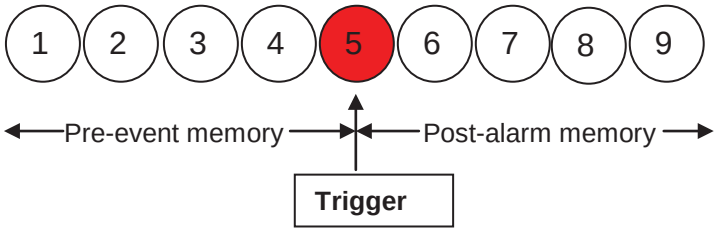
- Prefix: see file name prefix
- Y: placeholder for year, YYYY = 2009
- M: placeholder for month, MM = 11
- D: placeholder for day, DD = 15
- H: placeholder for hours, HH = 16
- M: placeholder for minutes, MM = 45
- S: placeholder for seconds, SS = 01

Video clip

“**Source**” The recording can be made from video streams 1-4.

The video stream that is configured in “Audio and Video” under “Select caching stream” is offered as a source.

“Pre-event recording” Pre-event recording interval in seconds (max. 9 seconds).
“Maximum duration” Maximum duration for each file (max. 10 seconds).

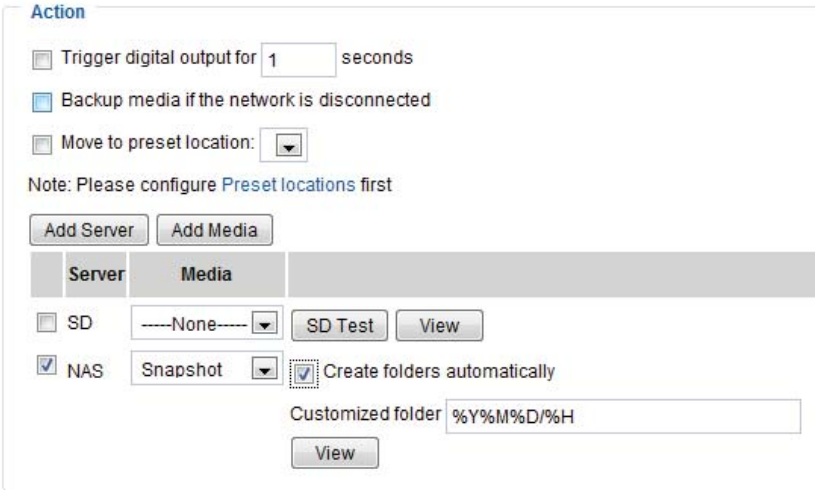


“Maximum file size” Maximum size of the file in kByte (max. 800 kByte).
“**File name prefix**” Enter a name that will prefix the video recording file name.
(see snapshot section for details)

Log file
Saves the current system log contents in a text file.

Custom Message
A user-defined message in the form of a text file is sent additionally.

13.4 Action



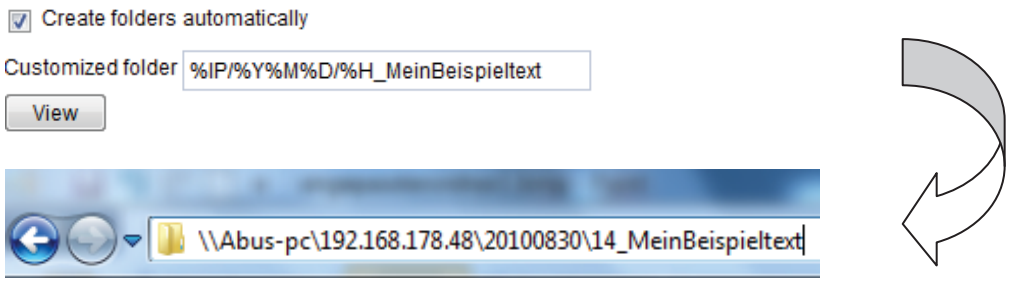
Here, you can configure the action that is to be executed if an alarm has been triggered.
"Trigger digital output for" When this option is enabled, the relay output for the network camera is activated.
"Move to preset location" A preset location is activated when the alarm is triggered.
"Server" the selected medium is sent on a particular server (e.g. an email is sent with a snapshot).

"Create folders automatically" Folders are automatically created in the directory of the network drives

"Customized folder" The unique name of the folder is determined using variables.
The variables that are available can be found in the table below.

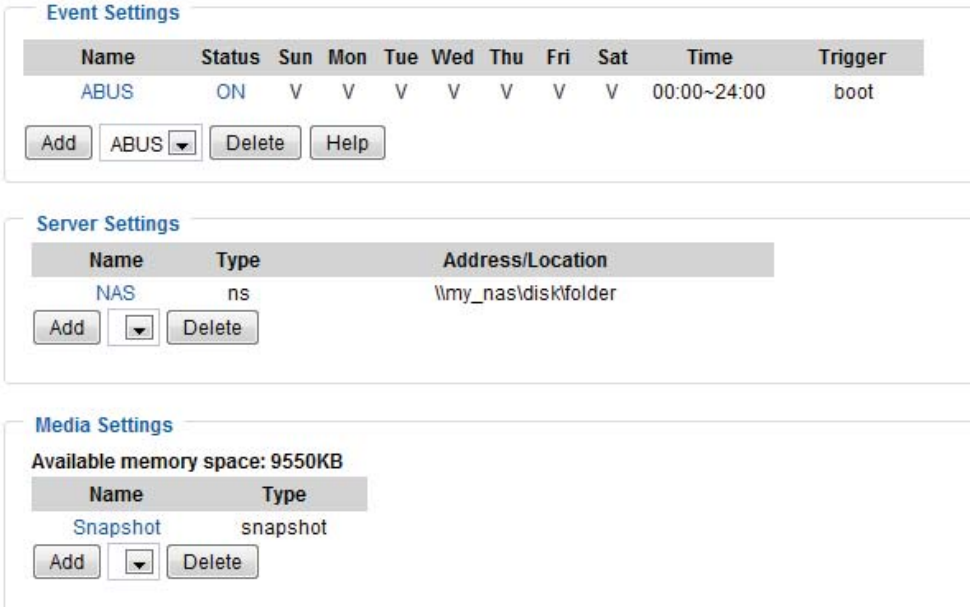
Symbol	Example/function
/	*Create a new folder*
%IP = IP address	*192.168.0.1*
%N = Event name	*Motion_W1*
%Y = Year	*2010*
%M = Month	*03*
%D = Day	*04*
%H = Hour	*14*
"Example text"	*"Example text"*

Example:
The following entry would generate this path.



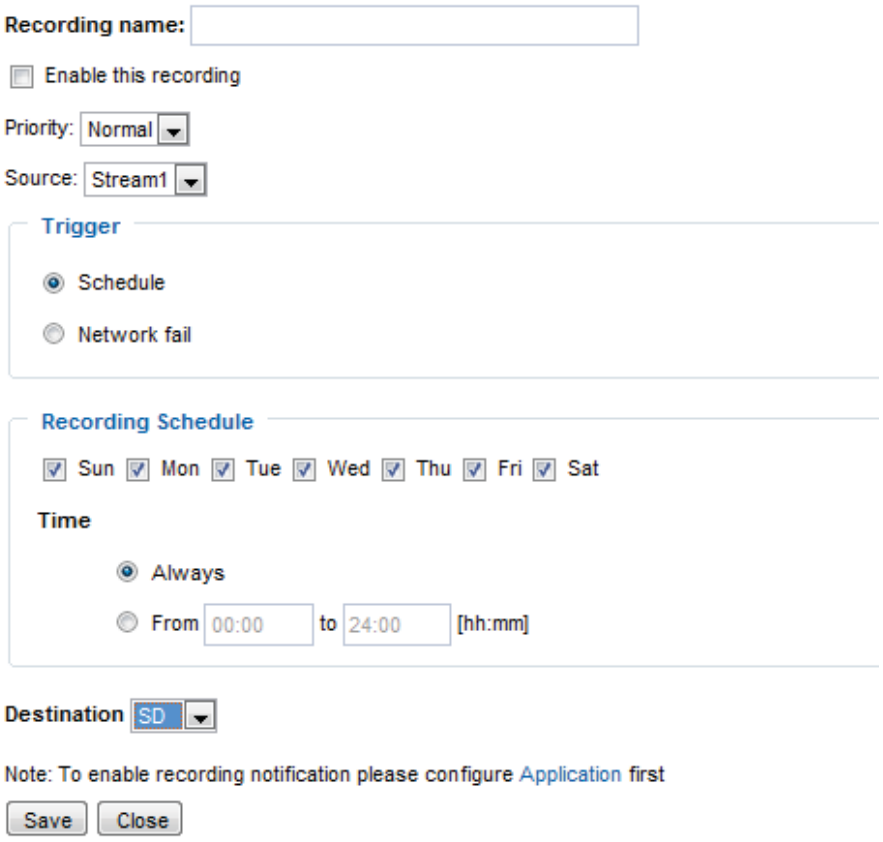
13.5 Application overview

Here, you can view all the “Events”, “Media types” and “Servers” that are configured in the network camera. You can check, delete and add the different settings here.
You can also check the different parameters such as name, status, trigger, address.

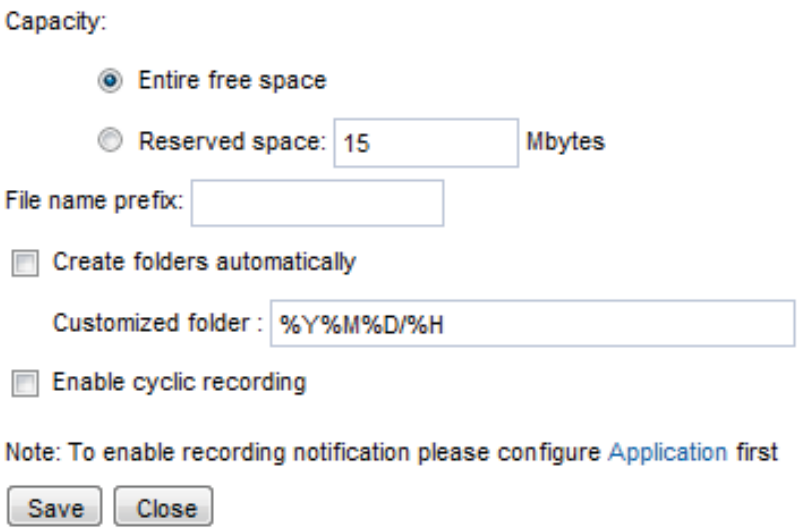


14. Recording

The recording section allows you to set up recordings with the option of setting up permanent video recordings for SD cards or network shares. You can save up to 2 video settings in the network camera.
Click **“Add”** to create a new recording.



Destination: **“Network drive”**



“**Recording name**” A unique name for a recording entry.
“**Enable this recording**” Select this option to activate the recording entry.
“**Priority**” Recordings with a higher priority are executed first.
“**Source**” The recording can be made from video streams 1-4.
“**Schedule**” The recording schedule is used.
“**Network fail**” If a network error occurs, the data is automatically saved onto SD card.
“**Sun**” – “**Sat**” allows you to select the day of the week for a recording.
“**Always**“ Activates the recording at all times.
“**From**“ – “**to**” The recording times are restricted.
“**Destination**” SD card or network folder.
“**Entire free space**” The maximum amount of space on the destination storage medium is used.
“**Reserved space**” Defines how many MB of free memory space should be reserved.
“**Enable cyclic recording**” Activates the cyclic recording function. If the set value is reached during the data recording, the oldest data is overwritten.

For more detailed information about “Create folders automatically”, refer to section “13.4 Action”.

If the “Customized folder” option is enabled, the cyclic recording function cannot be used.

Recording overview

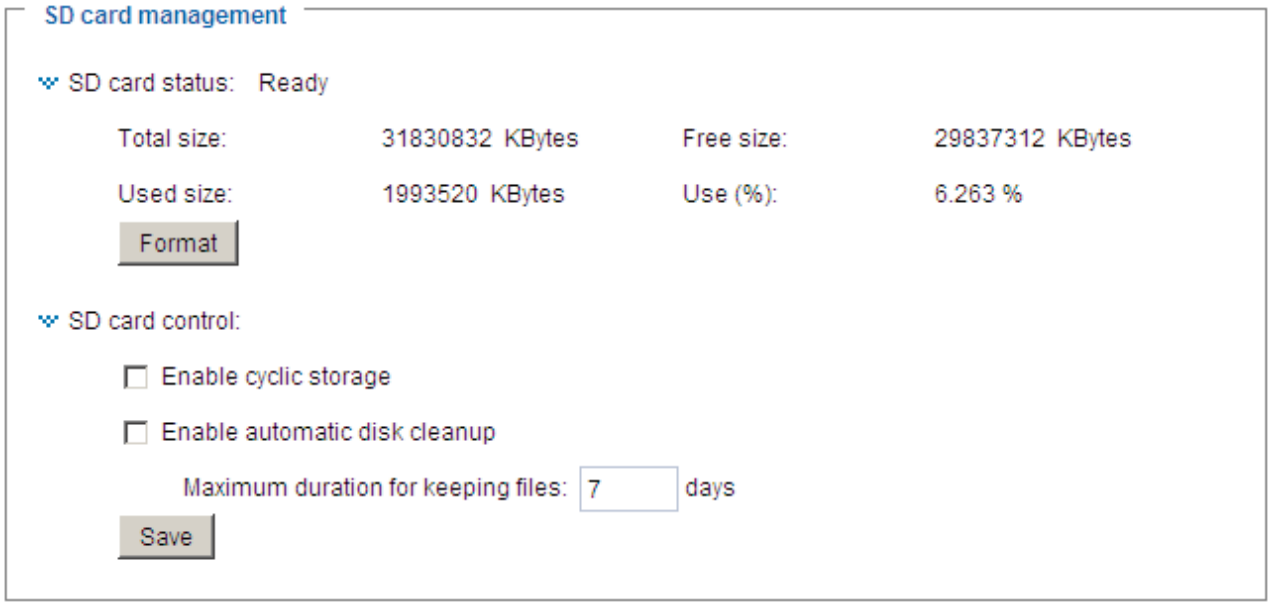
“Name (video)” Opens the recording configuration page.
“Status (ON)” Sets the recording status to ON or OFF.
“Destination (SD)” Opens a file list with the saved recordings.

Recording Settings
Name Status Sun Mon Tue Wed Thu Fri Sat Time Source Destination
ABUS ON V V V V V V V 00:00~24:00 stream1 SD
Add
SD Test
ABUS
Delete

15. Local memory

This section explains how you can manage the local memory (SD card) of the network camera. Cards of type SD/SDHC Class 6 of up to 32 GByte are supported.

SD card management

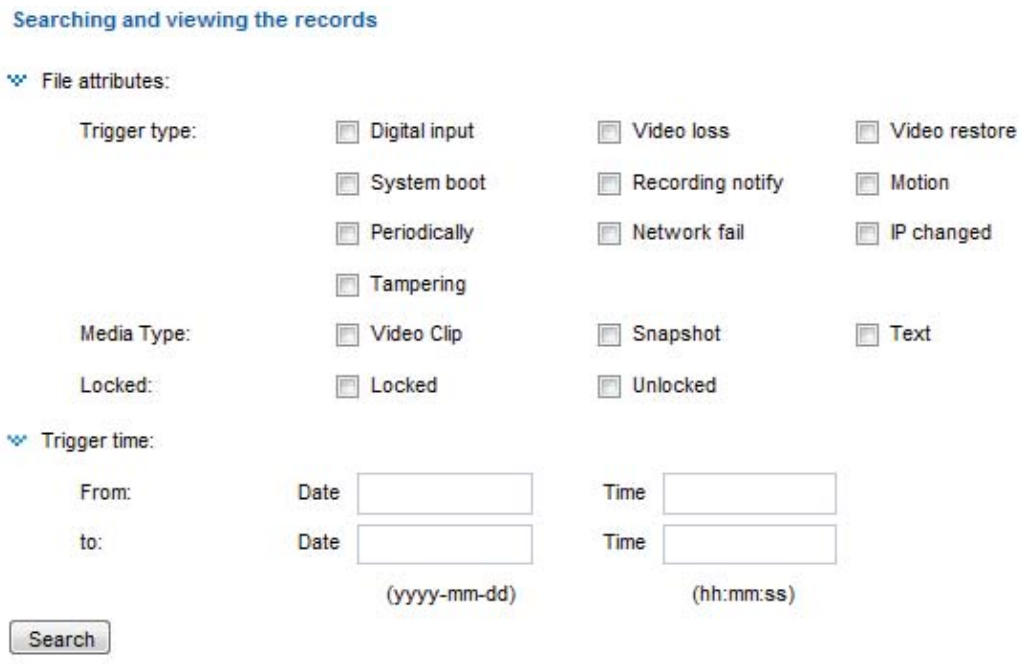


Use the **"Format"** function if you are using the card in the network camera for the first time.

Select the **"Enable cyclic storage"** option if the oldest data should be overwritten when the storage capacity of the SD card is full.

If you select **"Enable automatic disk cleanup",** the contents of the SD card are deleted after the maximum duration for keeping files is reached.

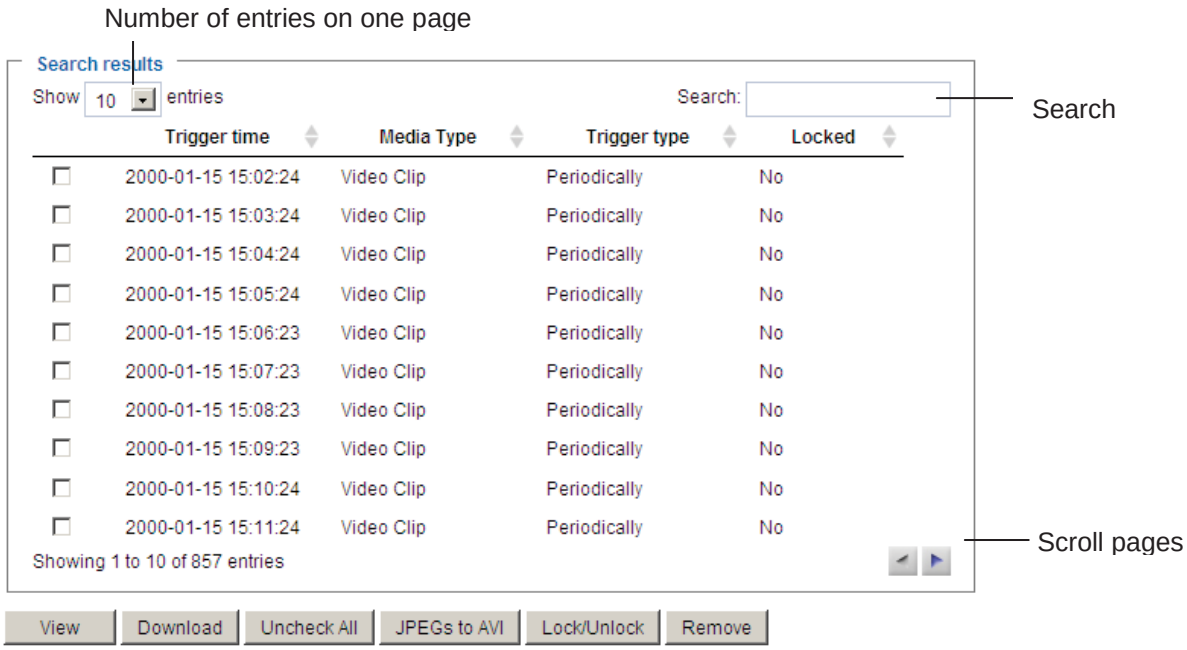
Searching and viewing the records
If no criteria are selected, the list of results will always include all recordings.



“Trigger type” Select one or more characteristics which apply to a recording that was made on the SD card.
“Trigger time” Select the desired period.

Click “Search”. All the recordings that meet your criteria are displayed in the list of results.

List of results



“View” Shows the selected recording in a new window.
“Download” Allows you to download the selected recording.
“JPEGs to AVI” You can select several JPEG single picture recordings (selection box) and convert these into an AVI file.
“Lock/Unlock” Individual recordings can be locked. Locked recordings will not be overwritten through cyclic storage. Press the button again (unlock) to remove this attribute.
“Remove” The selected recording is deleted.

You can also evaluate the data stored on the SD card using the SD card reader on your PC. The recorded data is displayed according to file type with the date and time in the file name.

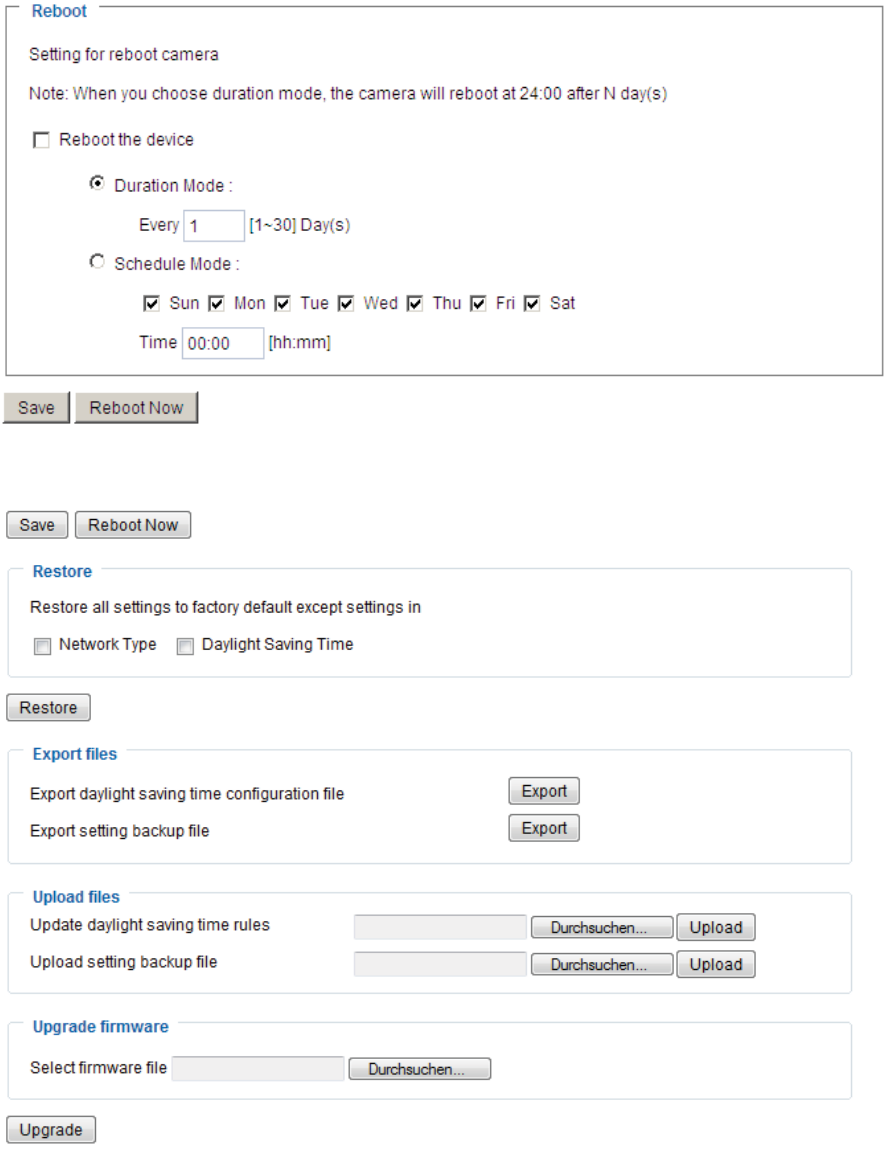
16. Log file

Click this link on the configuration page to display the system log file. The contents of the file supply useful information about the configuration and the connection following a system start. The standard of the log file is RFC 3164. You can also send data to a log server. Enable “Remote Protocol” and enter the IP address and the port number of the server.

17. Parameter list

Click this link on the configuration page to display all system parameter sets. This information can be provided for support cases.

18. Management



Reboot
Press the “Reboot Now” button to restart the network camera. You can also configure an automated device reboot. This may be helpful if network problems occur. We recommend rebooting the network camera on a weekly basis if you experience problems.

Restore
Click to restore the factory settings. All previous settings are discarded.

Export files
Press to export your network camera settings into a file. You can also export and save the daylight saving time configuration file.

Upload files
Press “Browse...” and select the correct configuration file.
Then press “Upload” and wait until the settings have been restored.

Upgrade firmware
Like an update with the installation wizard, you can update the firmware of the network camera here. You can download the latest firmware from www.abus-sc.com. Select the firmware file (*.pkg) and press “Upgrade”. The update takes a short time. When you restart the network camera, it is started with the new firmware.

Never disconnect the network camera from the power supply during an firmware upgrade, otherwise you risk causing irreparable damage.
A firmware upgrade can last up to 10 minutes.

19. Maintenance and Cleaning

19.1 Function Test

Regularly check the technical safety of the product, e.g. check the housing for damage.

If safe operation is no longer possible, cease operating the product and safeguard it against accidental operation.

Safe operation is no longer possible if:

- the device shows visible damage,
- the device no longer functions, and
- the device has been stored in adverse conditions for a long period of time, or
- the device has been subject to stress during transportation.

This product is maintenance-free for you. There are no components to service or anything inside the product to check. Never open it.

19.2 Cleaning

Clean the device with a clean, dry cloth. The cloth can be dampened with lukewarm water if it gets dirty.

Make sure that liquid does not get into the inside of the device as this will cause damage.
Do not use any chemical cleaning products as this could damage the surface of the housing.

20. Disposal

Devices that have been marked accordingly may not be disposed of as domestic waste. At the end of its service life, dispose of the product according to the applicable legal requirements.
Please contact your dealer or dispose of the products at the local collection point for electronic waste.

21. Technical data

Model number	TVIP52501
Camera type	Network camera
Image Sensor	1/2.7" CMOS Progressive Scan Sensor
Resolution	176 x 144 – 1920x1080 (intermediate levels can be freely selected)
Pixels (total)	1920x1080
Pixels (effective)	1920x1080
Lens	CS mount for lens, DC connector
Digital zoom	4 x
Day/night switch-over	Mechanically removing IR cut filter
Image compression	H.264, MPEG-4, MJPEG
Frame rate	H.264 1920x1080@25FPS
	MPEG-4 1920x1080@25FPS
	MJPEG 1920x1080@25FPS
Video out	Yes ,PAL or NTSC
Number of parallel streams	4
Number of maximum users	10
Minimum lighting (color)	0,8 Lux
Electronic shutter	1/5 - 1/40.000 seconds
Motion detection	3 zones
Pre-alarm/post-alarm memory	Yes
Image overlay	Date, camera name, private zones
Alarm inputs (NO/NC)	1
Digital output	1 (12VDC@400mA)
Audio	Audio output (Speaker Out), audio input, 2-way audio
Backlight compensation	Yes
Microphone	Integrated
White balance	Yes
Alert message	E-mail / FTP / HTTP notification / relay output / NAS drive / SD card
Supported browsers	Mozilla Firefox or Internet Explorer 6.x and higher
Software supported	eytron VMS, ONVIF support
SD card	max. 32 GB (SD/SD-HC)
RS-485 port	Yes
PTZ protocols	Pelco D, Pelco P, LiLin, Samsung scc643, DynaDome / SmartDome
Network connection	RJ45 Ethernet 10/100 Base-T with PoE
Network protocols	IPv4, IPv6, TCP/IP, HTTP, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, CoS, QoS, SNMP, 802.1X
Encryption	HTTPS SSLv3
Access protection	IP address filter, user name, password, 3 authorisation levels
Power supply	12 VDC, 24 VAC, 802.3af PoE
Current consumption	Max. 5.0 Watt
Operating temperature	0 °C ~ 40 °C
Dimensions (W x H x D)	76 x 60 x 162 mm
Certification	CE, RoHS, C-Tick

22. URL Commands

For some customers who already have their own web site or web control application, the video server/Network camera can be easily integrated through URL syntax. This section specifies the external HTTP-based application programming interface. Please refer to Appendix for complete URL command list.

23. License information

We point at the fact that thenetwork cameras TVIP52501 among other things include Linux software source codes that are licensed under the GNU General Public Licence (GPL). To assure a GPL compliant usage of the used source codes we point at the licence terms of GPL.

Licence text

The licence text of the GNU General Public Licence can be found on the included software CD or on the ABUS Security-Center Homepage under http://www.abus-sc.de/DE/Service-Downloads/Software?q=GPL
Source Code

The used source codes are available on the ABUS Security-Center Homepage under
http://www.abus-sc.de/DE/Service-Downloads/Software?q=GPL
for free download.

Operation of the total system

With a download of the software packages (source codes) it is not possible to built a running total system. Therefore additional software applications and the network camera hardware is needed.

24. Technologie Lizenzhinweise

H.264, MPEG-4 AAC Technology

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0516621; FR PAT. 0516621; GB PAT. 0516621; GR PAT. 0516621; IT PAT. 0516621; LI PAT. 0516621; LU PAT. 0516621; NL PAT. 0516621; SE PAT 0516621; US PAT 5444816; AT PAT. 819303/AT E 198805T1; AU PAT. 697256; BE PAT. 819303; BR PAT. 9604838-7; CA PAT. 2216315; CH PAT. 819303; CN PAT. ZL96193827.7; DE PAT. 819303/DE69611607T2; DK PAT. 819303; ES PAT. 819303; EP PAT. 819303; FR PAT. 819303; GB PAT. 819303; IT PAT. 819303; JP PAT. APP. 8-529817; NL PAT. 819303; SE PAT. 819303; US PAT. 5664053. THE LIST MAY BE UPDATED FROM TIME TO TIME BY LICENSORS AND A CURRENT VERSION OF WHICH IS AVAILABLE ON LICENSOR'S WEBSITE AT HTTP://WWW.VOICEAGE.COM